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MX SITING INVESTIGATION. GRAVITY SURVEY - SEVIER DESERT VALLEY,--ETC(U)

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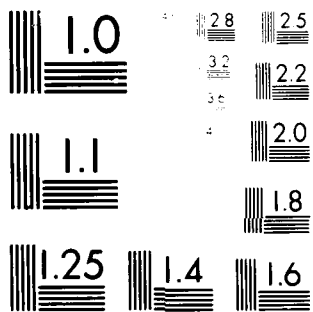
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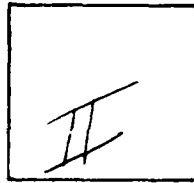


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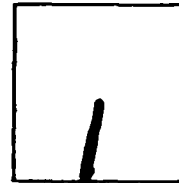
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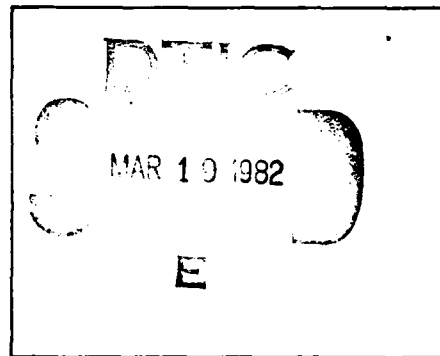
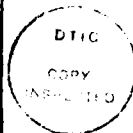
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MX SITING INVESTIGATION

GRAVITY SURVEY - SEVIER DESERT VALLEY

UTAH

Prepared for:

U.S. Department of the Air Force  
Ballistic Missile Office (BMO)  
Norton Air Force Base, California 92409

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24 January 1981

**fugro** NATIONAL, INC.

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| 4. TITLE (and Subtitle)<br><b>MX Siting Investigation<br/>Gravity Survey, Sevier Desert Valley<br/>Utah</b>   |                       | 5. TYPE OF REPORT & PERIOD COVERED<br><b>Final</b>                               |
| 7. AUTHOR(s)<br><b>Fugro National</b>   |                       | 6. PERFORMING ORG. REPORT NUMBER<br><b>FN-TR-33-SD</b>                           |
| 9. PERFORMING ORGANIZATION NAME AND ADDRESS<br><b>Entec Western Inc. (formerly Fugro National)<br/>PO Box 7765<br/>Long Beach Ca 90807</b>  |                       | 8. CONTRACT OR GRANT NUMBER(s)<br><b>F04704-80-C-0006</b>                        |
| 11. CONTROLLING OFFICE NAME AND ADDRESS<br><b>U.S. Department of the Air Force<br/>Space and Missile Systems Organization<br/>Wright AFB OH 45433 (S.A.M.S.O.)</b>  |                       | 10. PROGRAM ELEMENT, PROJECT, TASK<br>AREA & WORK UNIT NUMBERS<br><b>64312 F</b> |
| 14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)   |                       | 12. REPORT DATE<br><b>24 Jan 81</b>  |
|   |                       | 13. NUMBER OF PAGES<br><b>40</b>   |
|   |                       | 15. SECURITY CLASS. (of this report)<br><b>-</b>                                 |
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| 20. ABSTRACT (Continue on reverse side if necessary and identify by block number)<br><b>Results of the gravity survey in the Sevier Desert Valley<br/>of Utah Central Utah project indicate that the<br/>environment in the central part of the study area overlies, or is<br/>interbedded with, a thick sequence of basic basalts and that<br/>the basalt is about 1000 ft above the base of the Sevier Desert, where<br/>the environment is interpreted to be covered through a thick<br/>sequence of the central part of the area may make the location of a</b> |                       |  |

## FOREWORD

Methodology and Characterization studies during Fiscal Years 1977 and 1978 (FY 77 and 78) included gravity surveys in ten valleys in Arizona (five), Nevada (two), New Mexico (two), and California (one). The gravity data were obtained for the purpose of estimating the gross structure and shape of the basins and the thickness of the valley fill. There was also the possibility of detecting shallow rock in areas between boring locations. Generalized interpretations from these surveys were included in Fugro National's Characterization Reports (FN-TR-26a through e).

During the FY 77 surveys, measurements were made to form an approximate 1-mile grid over the study areas and contour maps showing interpreted depth to bedrock were made. In FY 79, the decision was made to concentrate on verifying and refining suitable area boundaries. This decision resulted in a reduction in the gravity program. Instead of obtaining gravity data on a grid, the reduced program consisted of obtaining gravity measurements along profiles across the valleys where Verification studies were also performed.

The Defense Mapping Agency (DMA), St. Louis was requested to provide gravity data from its library to supplement the gravity profiles. For Big Smoky, Hot Creek, and Big Sand Springs valleys, a sufficient density of library data was available to permit construction of interpreted contour maps instead of just two-dimensional cross sections.

In late summer of FY 79, supplementary funds became available to begin data reduction. At that time, inner zone terrain corrections were begun on the library data and the profiles from Big Smoky Valley, Nevada, and Butler and La Posa valleys, Arizona. The profile data from Whirlwind, Hamlin, Snake East, White River, Garden and Coal valleys, Nevada, became available from the field in early October 1979.

A continuation of gravity interpretations has been incorporated into the FY 80 program, and the results are being summarized in a series of valley reports. Reports covering Nevada-Utah gravity studies will be numbered, "FN-TR-33-", followed by the abbreviation for the subject valley. In addition, more detailed reports of the results of FY 77 surveys in Dry Lake and Ralston valleys, Nevada, were prepared. Verification studies continued in FY 80, and gravity studies are included in the program. DMA will continue to obtain the field measurements, and there was a return to the grid pattern. The interpretation of the grid data allows the production of contour maps which will be valuable in the deep basin structural analysis needed for computer

modeling in the water resources program. The gravity interpretations will also be useful in Nuclear Hardness and Survivability (NH&S) evaluations.

The basic decisions governing the gravity program are made by BMO following consultation with TRW, Inc., Fugro National, and the DMA. Conduct of the gravity studies is a joint effort between DMA and Fugro National. The field work, including planning, logistics, surveying, and meter operation is done by the Defense Mapping Agency Hydrographic/Topographic Center (DMAHTC), headquartered in Cheyenne, Wyoming. DMAHTC reduces the data to Simple Bouguer Anomaly (see Section A1.4, Appendix A1.0). The Defense Mapping Agency Aerospace Center (DMAAC), St. Louis, calculates outer zone terrain corrections.

Fugro National provides DMA with schedules showing the valleys with the highest priorities. Fugro National also recommended locations for the profiles in the FY 79 studies with the constraints that they should follow existing roads or trails. Any required inner zone terrain corrections are calculated by Fugro National prior to making geologic interpretations.



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## 1.0 INTRODUCTION

### 1.1 Objective

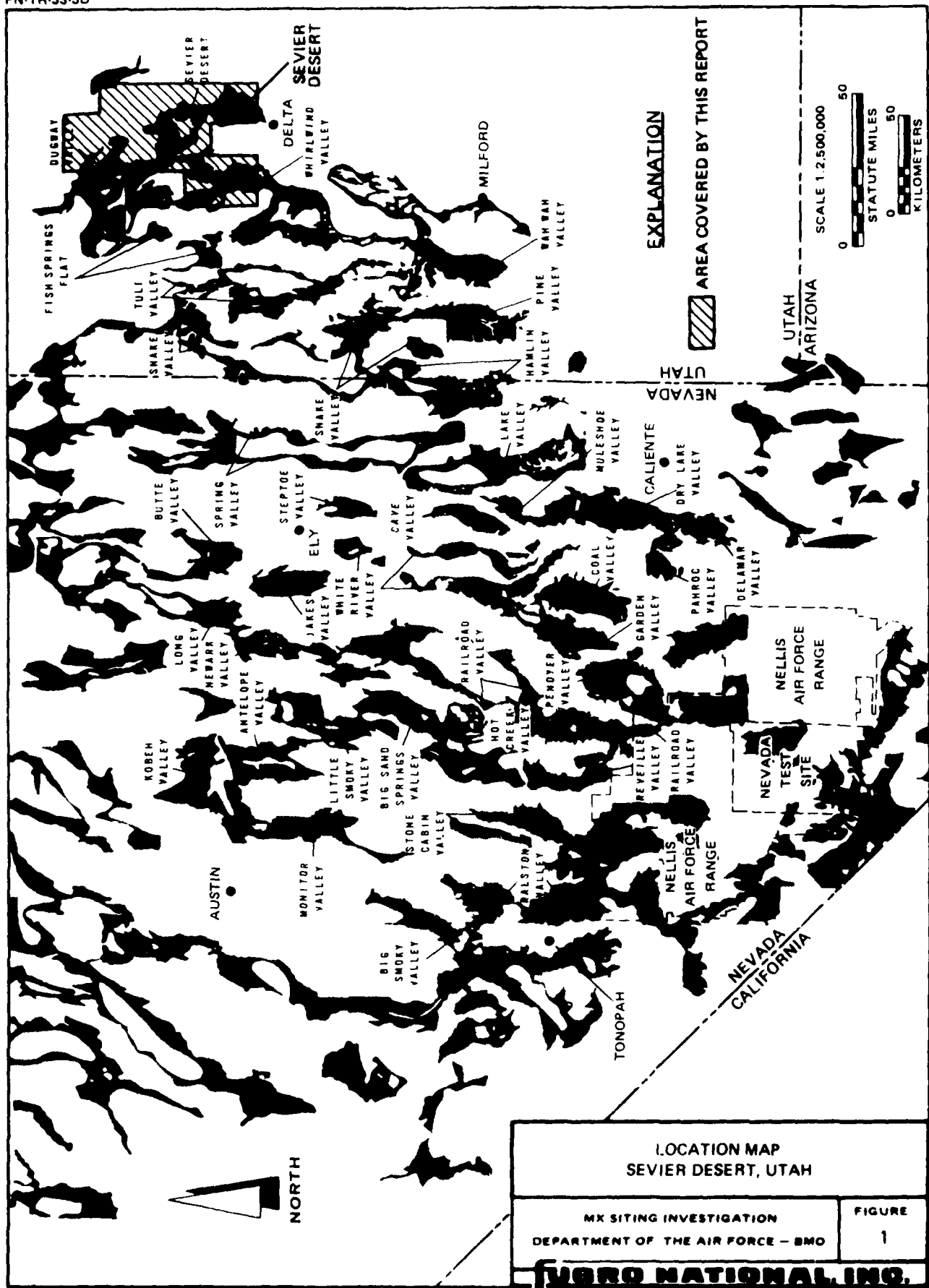
Gravity measurements were made in Sevier Desert Valley for the purpose of estimating the overall shape of the structural basin, the thickness of alluvial fill, and the location of concealed faults. The estimates will be useful in modeling the dynamic response of ground motion in the basin and evaluating groundwater resources.

### 1.2 Location

Sevier Desert is located (see Figure 1) in west central Utah in Tooele, Juab, and Millard counties. It is north of Sevier Lake; its center lying approximately 20 miles north of Delta, Utah. Sevier Desert is a broad, irregularly shaped valley. The part of the valley covered by this report is bounded (Figure 2) on the north by Dugway Proving Ground, Sheeprock Mountain, and Simpson Mountains, to the east by Gilson Mountain, to the west by Dugway Valley and the McDowell Mountains (Keg Mountain), and to the south by Whirlwind Valley and the inhabited area surrounding Delta, Utah. Access is fair along a system of unmaintained roads as well as U.S. Highway 50 which cuts across the southeast corner of the area. Most of the valley is undeveloped rangeland.

### 1.3 Scope of Work

Gravity measurements were made by the Defense Mapping Agency Hydrographic-Topographic Center/Geodetic Survey Squadron (DMA HTC/GSS).



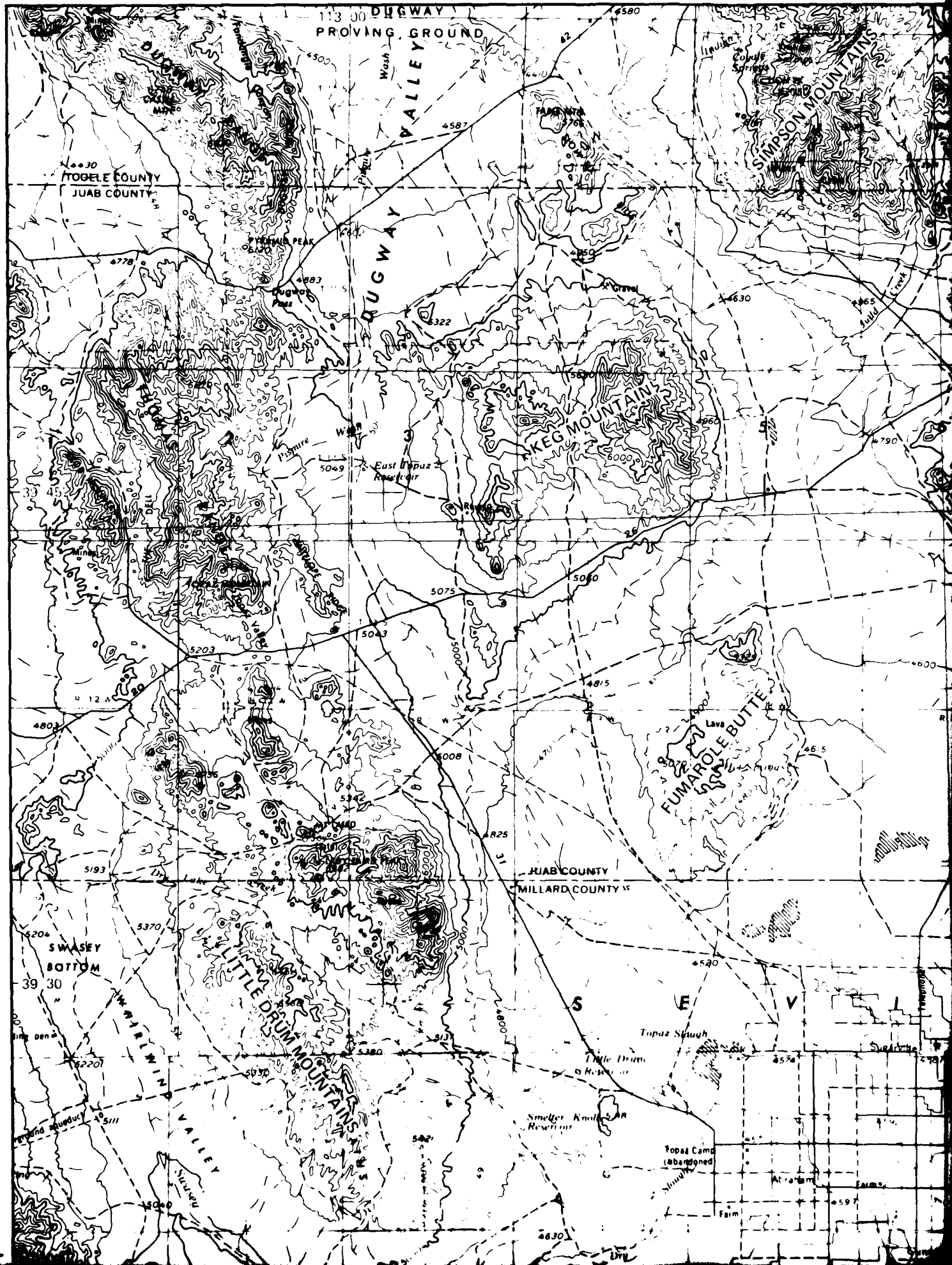
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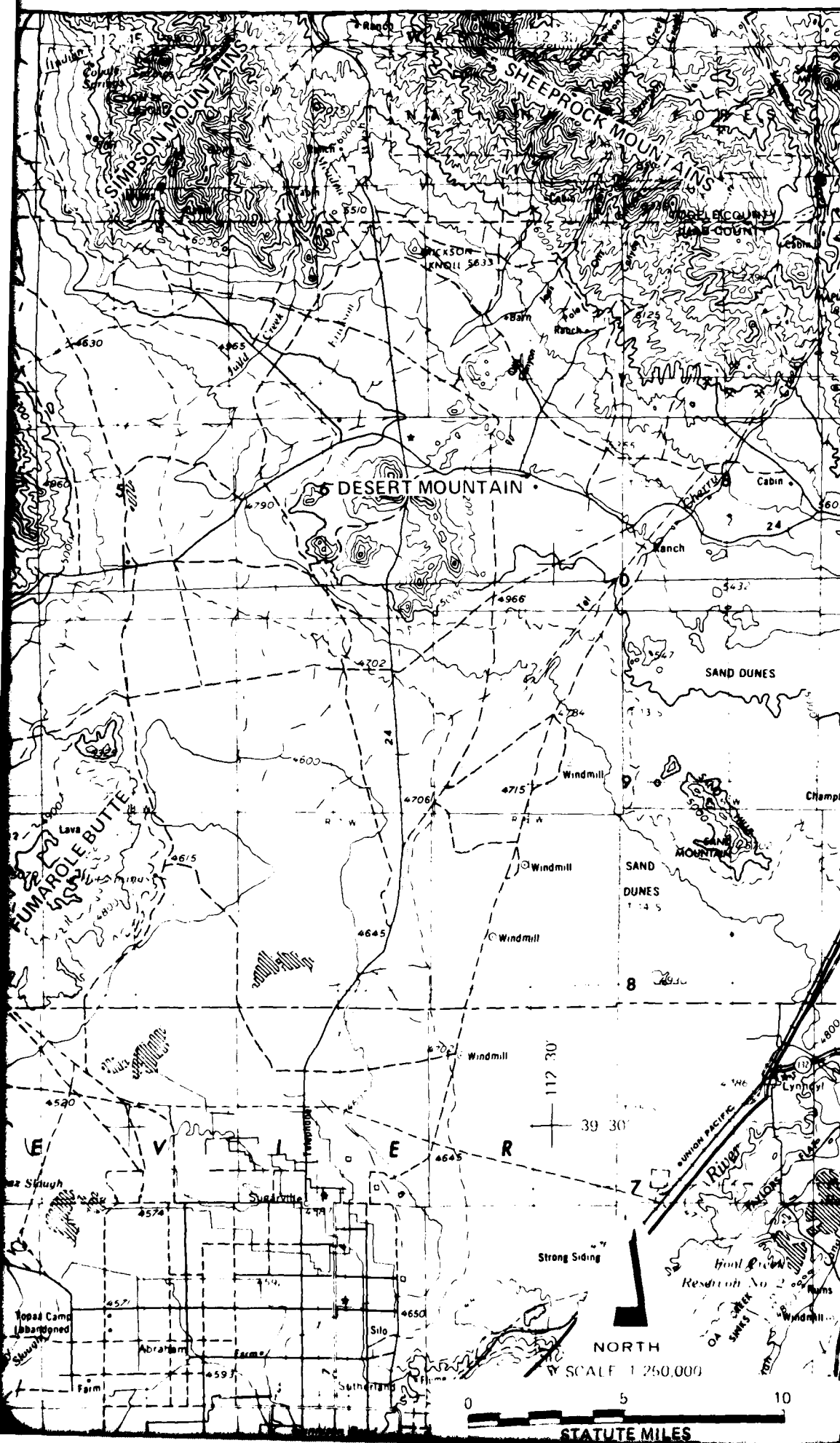
LOCATION MAP  
SEVIER DESERT, UTAH

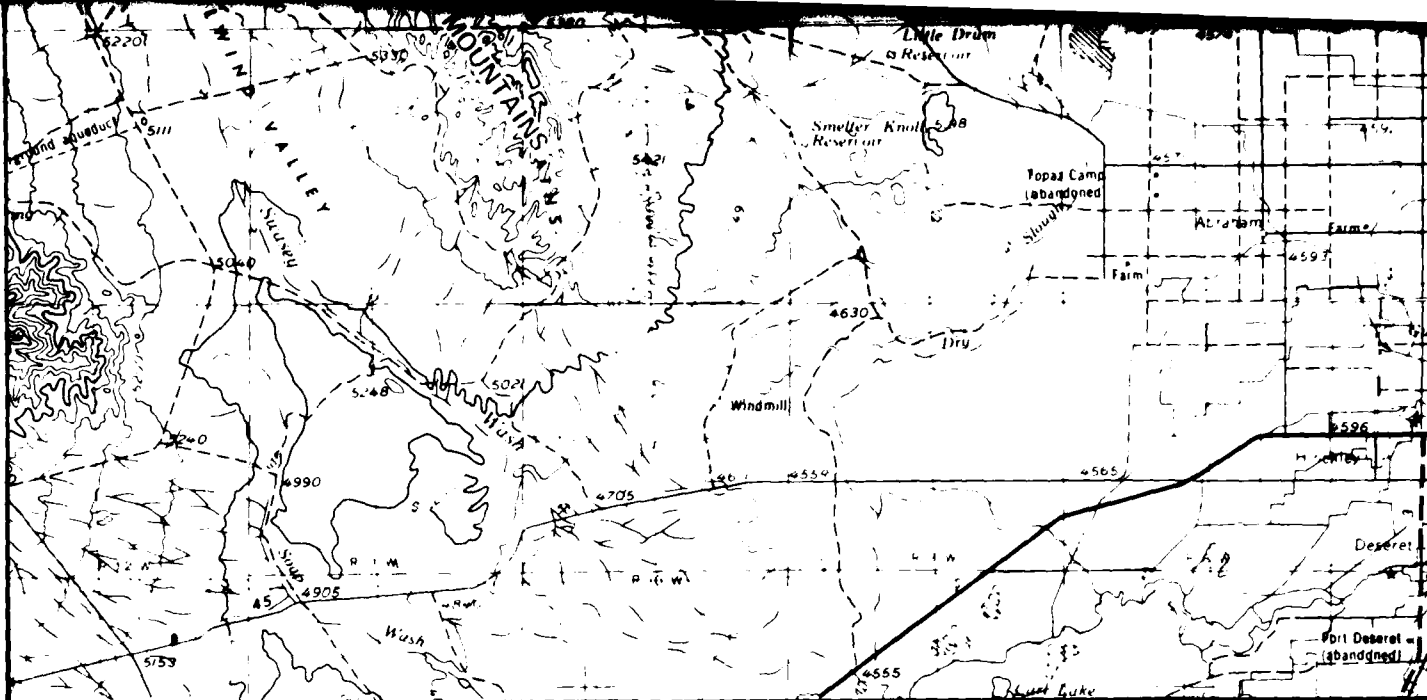
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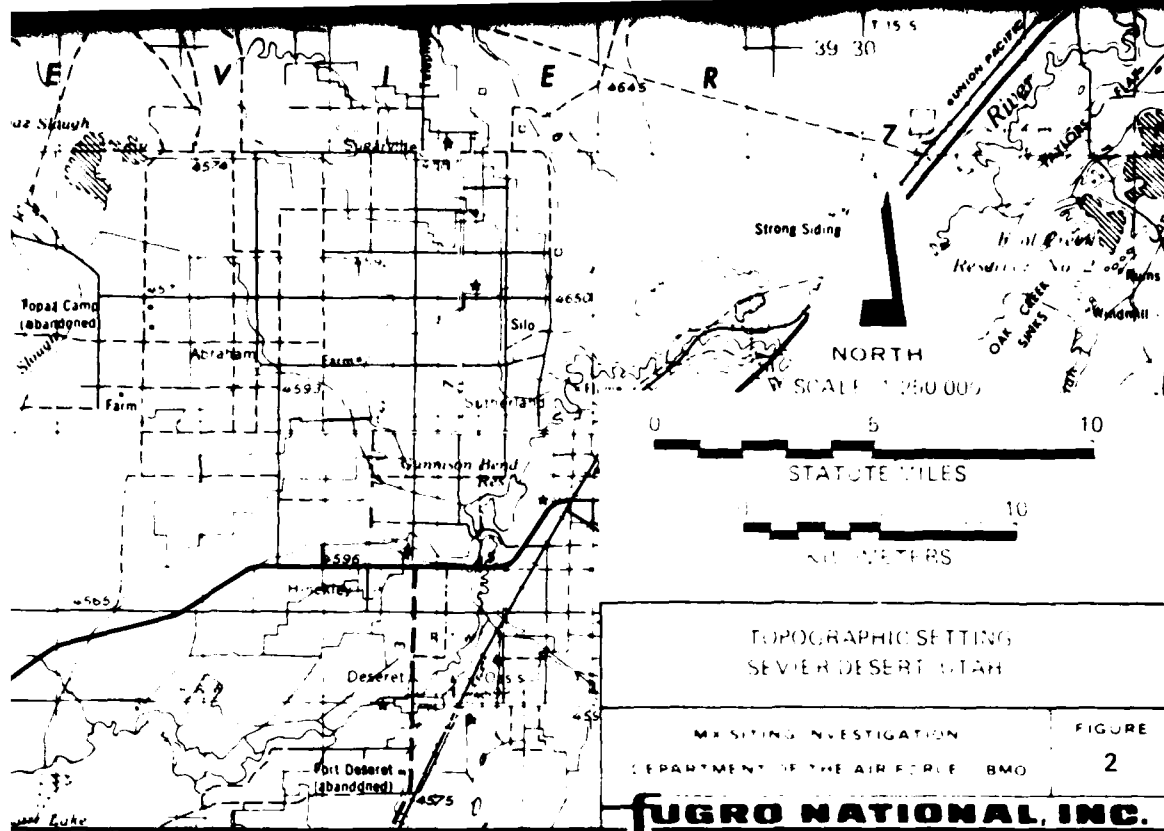






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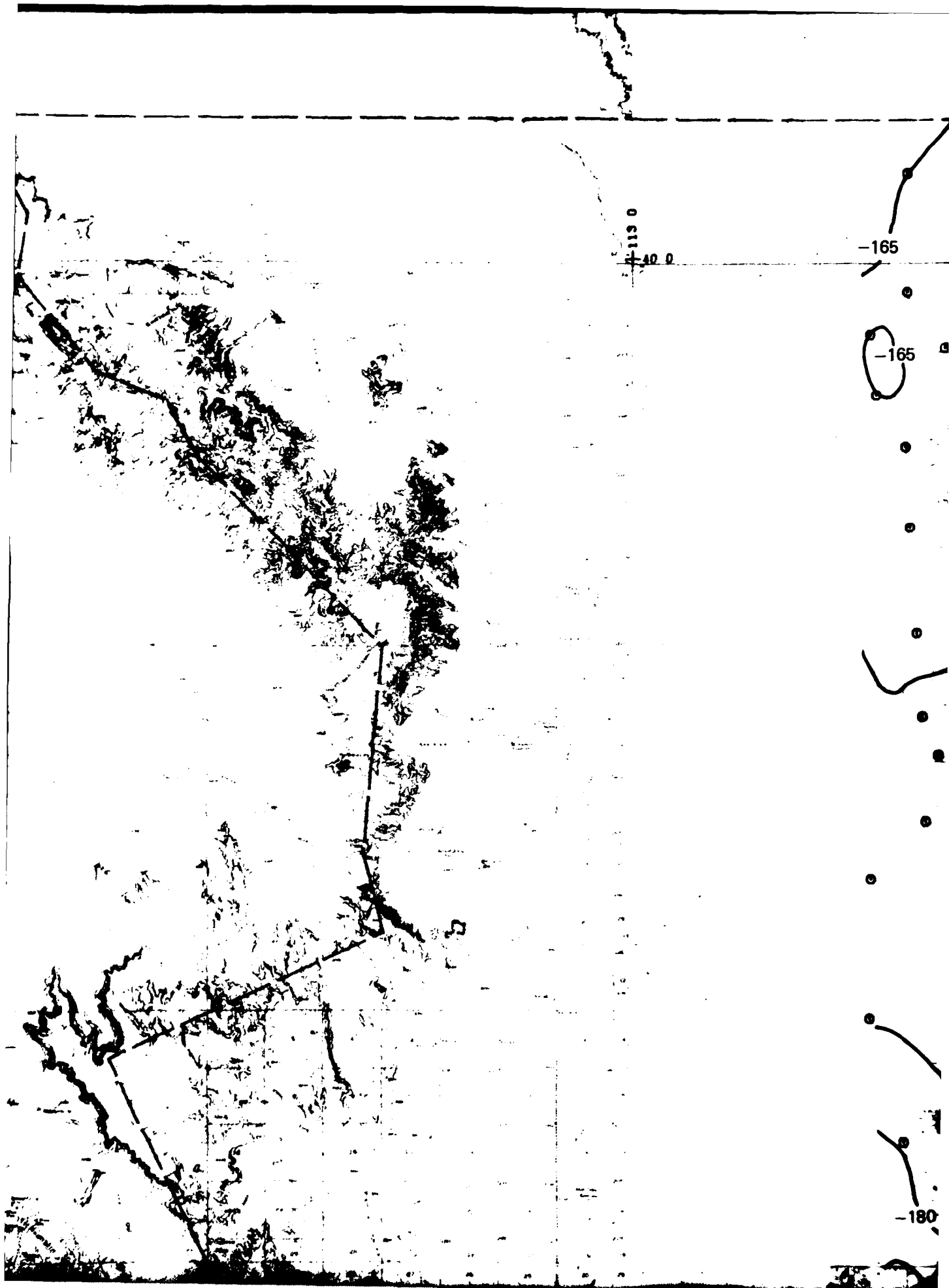


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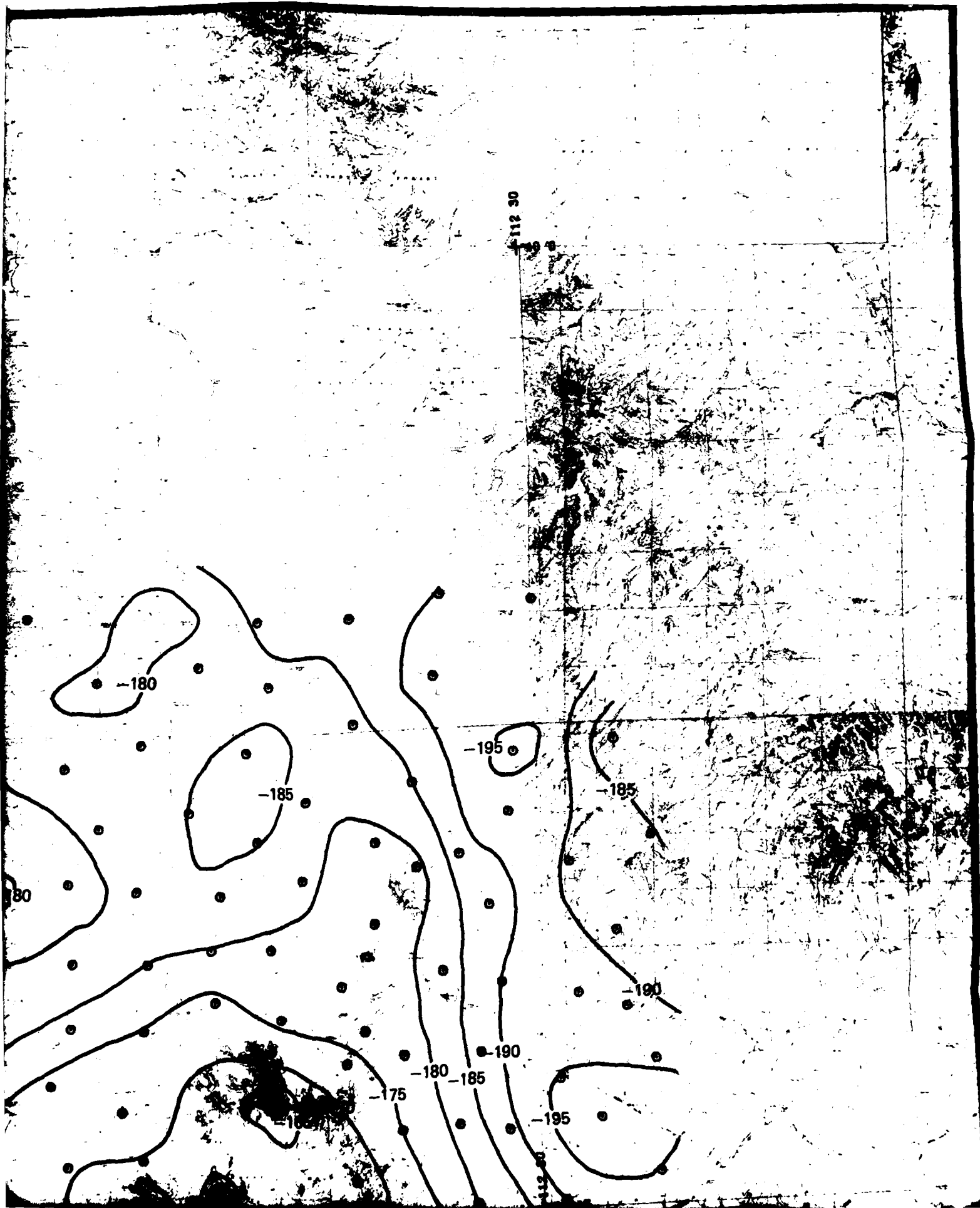
Dugway and Sevier Desert valleys were studied together, but the results are presented in separate reports. The region containing both valleys lies between latitudes  $39^{\circ}30'$  and  $40^{\circ}05'$  and between longitudes  $112^{\circ}15'$  and  $113^{\circ}00'$ . There are 879 gravity stations in this region. The stations on bedrock were used to establish a common regional gravity trend for the two valleys. For the purpose of this report, Sevier Desert Valley is the area bounded by latitudes  $39^{\circ}20'$  and  $40^{\circ}00'$  and by longitudes  $112^{\circ}30'$  and  $112^{\circ}55'$  (Figure 2). The area is approximately 50 miles (80 km) long and 30 miles (48 km) wide. The gravity stations were distributed throughout the valley at an approximate interval of 1.4 miles (2.3 km). Drawing 1 is a Complete Bouguer Anomaly (CBA) and gravity station map.

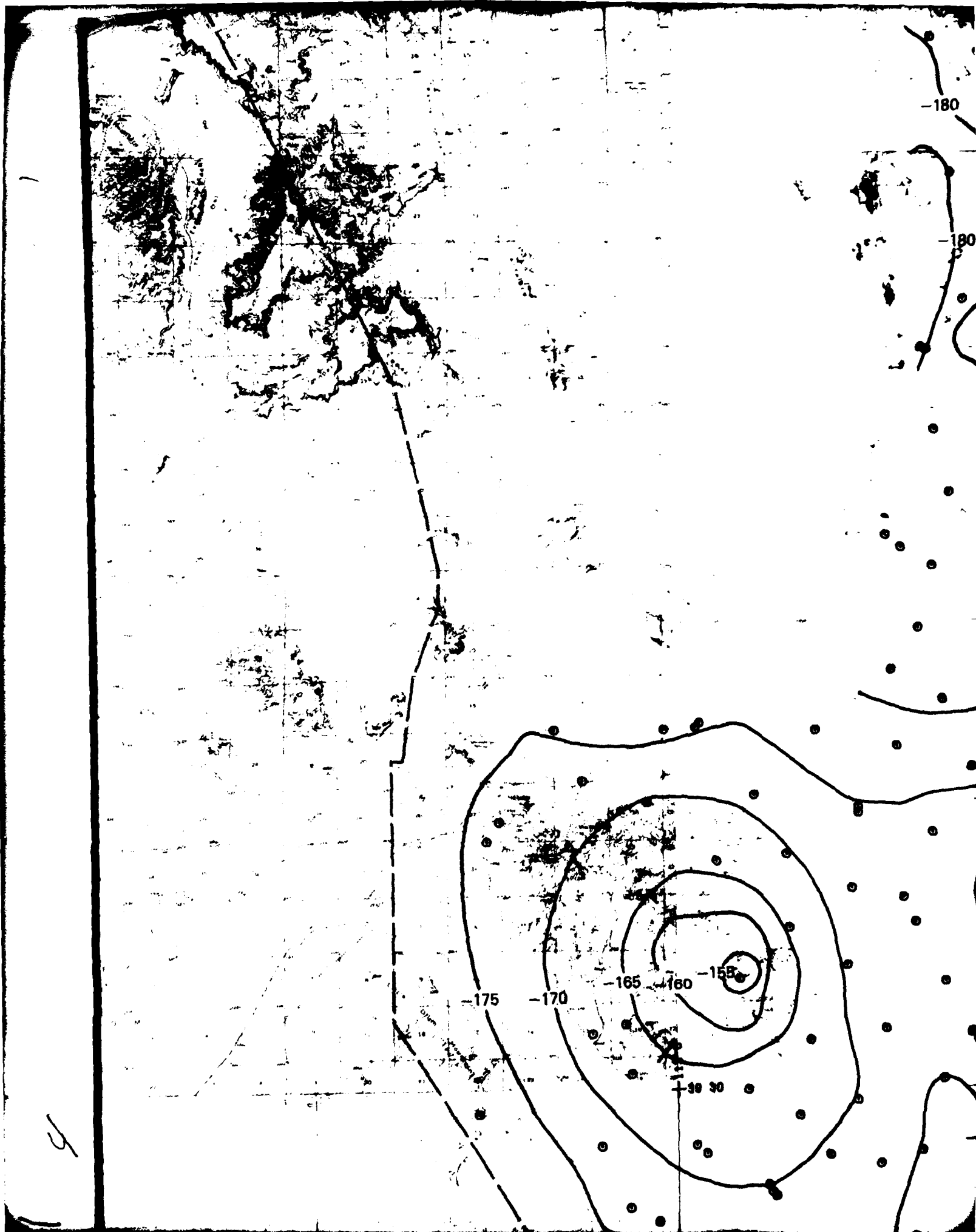
Station elevations were established within a tolerance of 5 feet (1.5 m). This tolerance limits the gravity precision to 0.3 milligals.



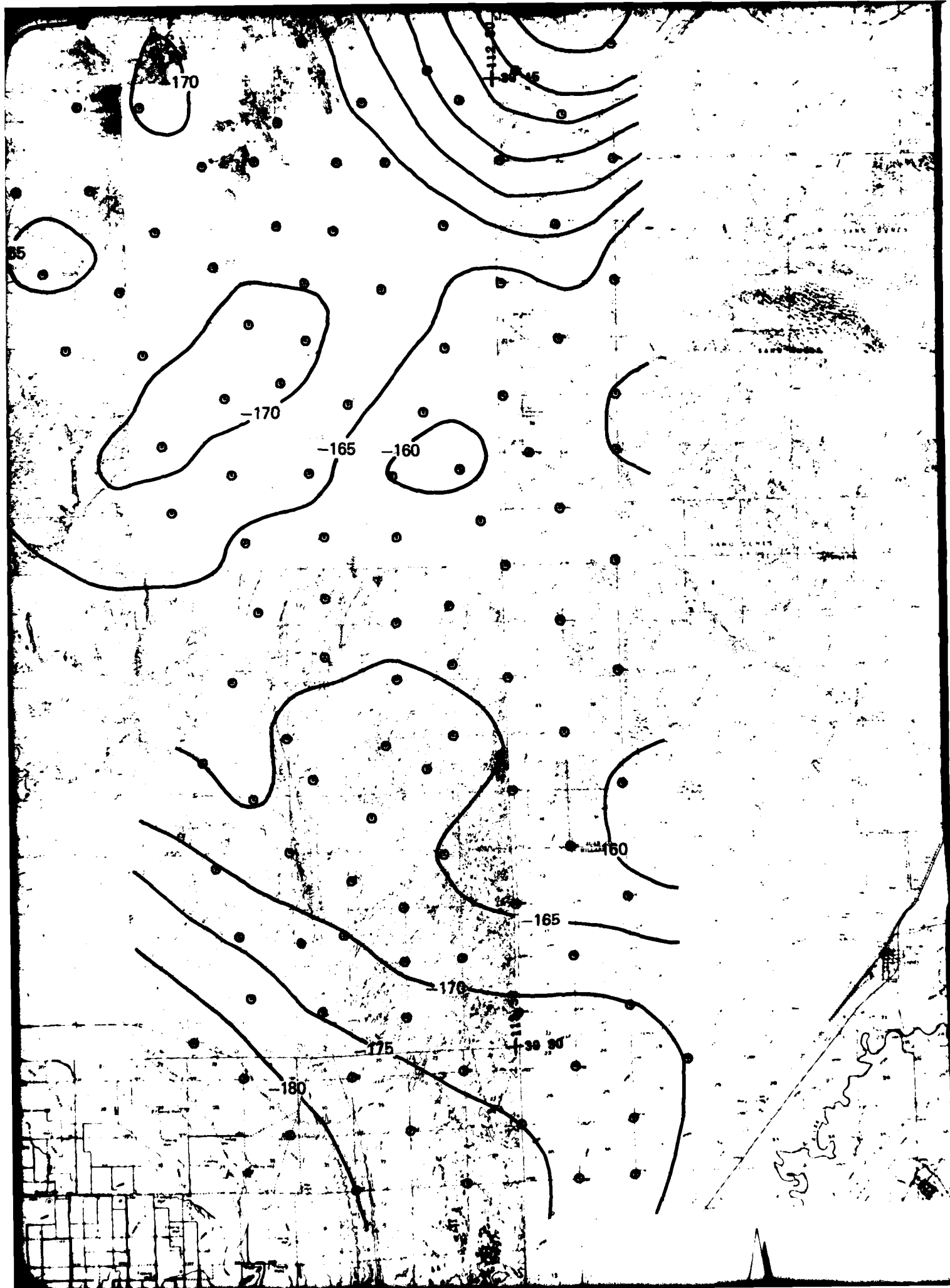


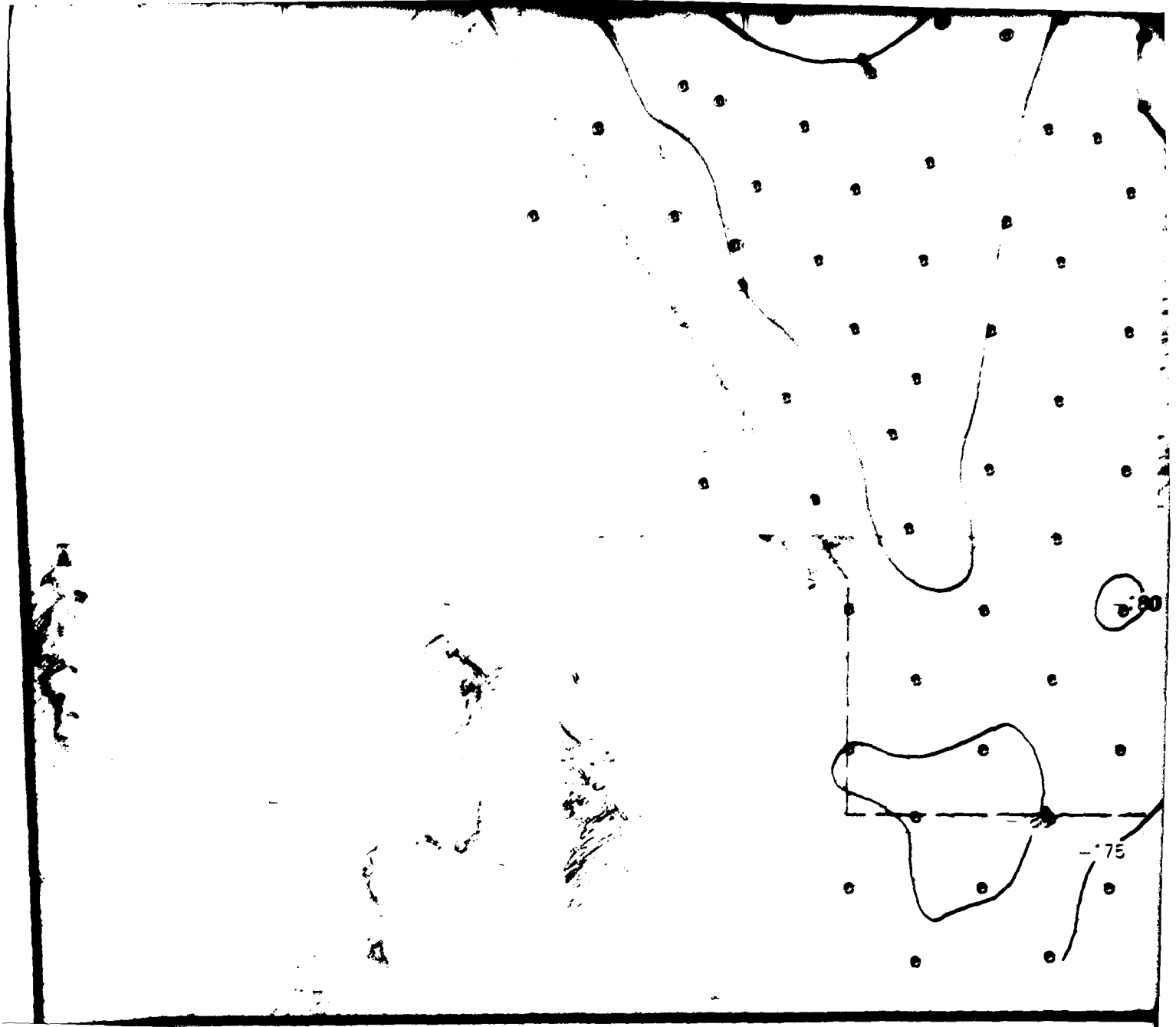


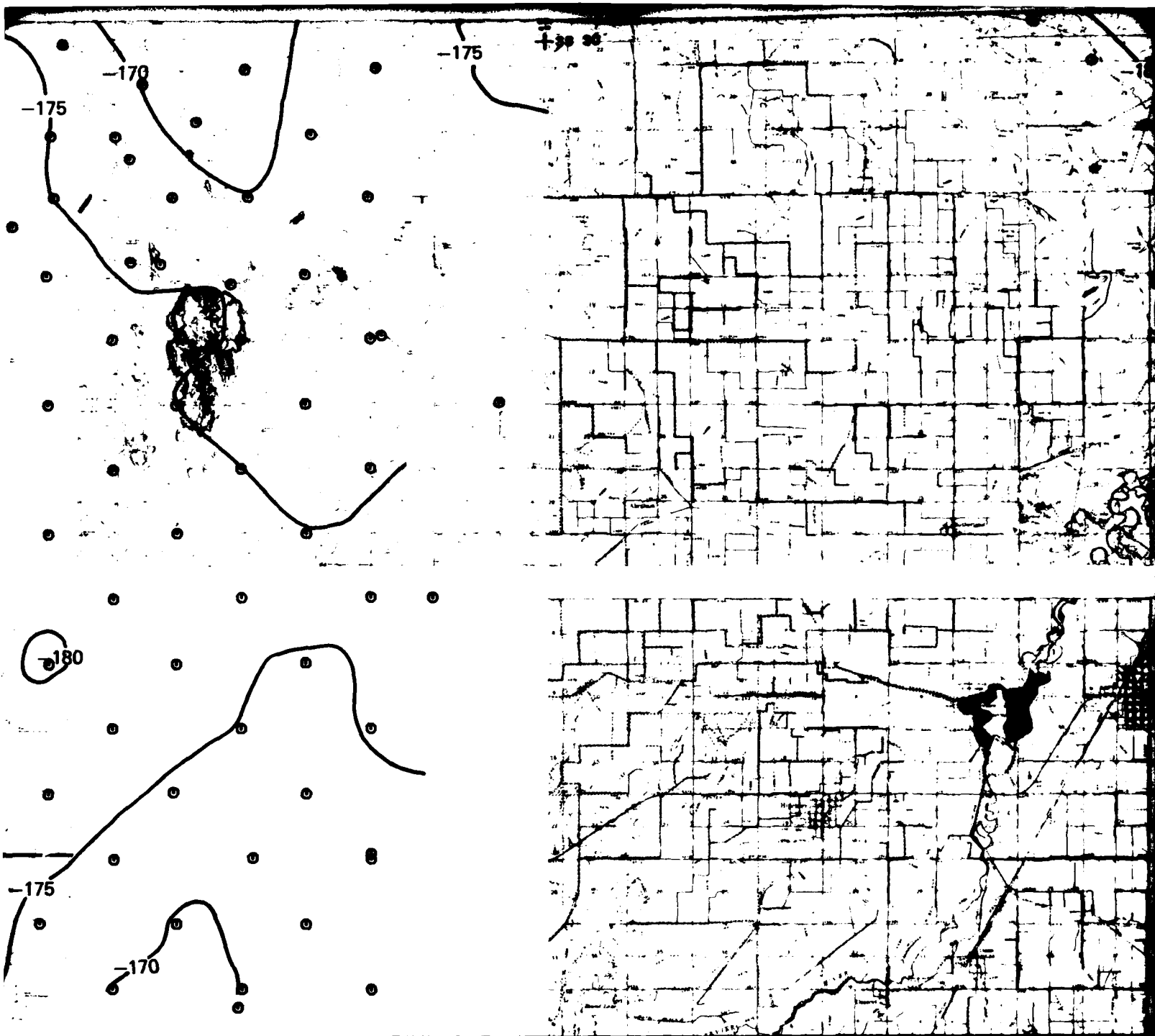




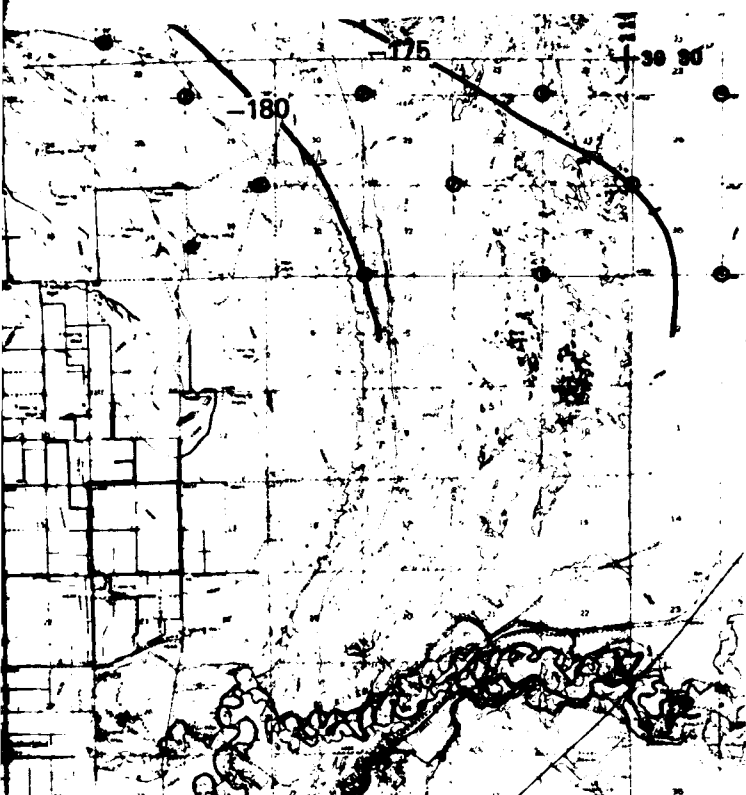






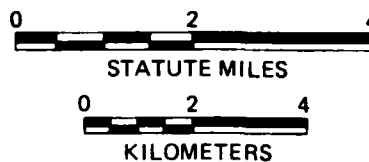






NORTH

SCALE 1: 125,000



STATUTE MILES

KILOMETERS

### EXPLANATION

● GRAVITY FIELD STATIONS

— 175 — CBA GRAVITY CONTOURS

CONTOUR INTERVAL = 5 MILLIGALS

COMPLETE BOUGUER ANOMALY CONTOURS  
SEVIER DESERT, UTAH

MX SITING INVESTIGATION  
DEPARTMENT OF THE AIR FORCE - BMO

DRAWING  
1

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## 2.0 GRAVITY DATA REDUCTION

DMAHTC/GSS obtained the basic observations for the new stations and reduced them to Simple Bouguer Anomalies (SBA) as described in Appendix A1.0. Up to three levels of terrain corrections were applied to convert the SBA to the Complete Bouguer Anomaly (CBA). First, the Defense Mapping Agency Aerospace Center (DMAAC), St. Louis, used its library of digitized terrain data and a computer program to calculate corrections out to 104 miles (167 km) from each station. When the program could not calculate the terrain effects near a station, a ring template was used to estimate the effect of terrain within approximately 3000 feet (914 m) of the station. The third level of terrain corrections was applied to those stations where 10 feet (3 m) or more of relief was observed within 130 feet (40 m). In these cases, the elevation differences were measured in the field at a distance of 130 feet (40 m) along six directions from the stations. These data were used to calculate the effect of the very near relief. The principal facts for the Sevier Desert Valley stations are listed in Appendix A 2.0.

### 3.0 GEOLOGIC SUMMARY

The Sevier Desert Valley lies within the Basin and Range physiographic province. Sevier Desert is a broad valley extending approximately 20 miles (32 km) in a north-south direction. For the purposes of this study, however, only the area north of Delta, Utah, and east of Baker Hot Springs is considered. The northern and eastern boundaries of the valley are the Simpson Mountains, Sheeprock Mountains, Gilson Mountain, and Canyon Mountains (Figure 2).

Rocks and structures have been recognized in the Sevier Desert area from six major orogenic and depositional events occurring from the late Precambrian to the Miocene and possibly the late Pleistocene (Hintze and Baer, 1979). Early Paleozoic sedimentary rocks, deposited in the Cordilleran miogeosyncline, crop out in the surrounding mountains and underlie the valley-fill deposits (Hintze and Baer, 1979). Sevier Desert lies on the southern edge of the late Paleozoic Oquirrh Basin and scattered occurrences of late Paleozoic rocks crop out in the Gilson Mountains (Stokes, 1963). The late Triassic to early Cenozoic Sevier Orogeny accounted for the majority of the folding and faulting observed in the mountains surrounding the Sevier Desert. During this orogenic event, there was general uplift accompanied by 40 to 100 miles (64 to 160 km) of eastward translation of Paleozoic strata along west dipping thrust faults. These structures were only mildly affected by the early Cenozoic Laramide Orogeny. Oligocene volcanism resulted

in thick deposits of ash flow tuffs, lava flows, stocks, and laccoliths. The present valley configuration is probably largely the result of east-west extension and associated block faulting during the late Tertiary and Quaternary periods. The probable major zones of crustal weakness below the area may be marked by the Quaternary basalt flows and cones which trend northerly into the valley from the south.

Sevier Desert is underlain by a variable thickness of Miocene to Holocene basin-fill deposits. The deeper portions of the valley are approximately 8500 feet (2591 m) deep (Hintze and Baer, 1979) with basin-fill consisting of sandstone, shale, limestone, basalt, evaporites, conglomerate, and tuff. The surficial deposits consist of lacustrine clayey sands to gravelly sands deposited in Pleistocene Lake Bonneville (Stokes, 1963) and alluvial deposits, all with varying degrees of cementation.

#### 4.0 INTERPRETATION

The basis of interpretation is the Complete Bouguer Anomaly (CBA). The CBA is defined in Appendix A1.4.

A valley filled with alluvium which has a lower density than the surrounding bedrock will create a negative anomaly. Interpretation entails the removal of regional trends leaving the gravitational reflection of the valley fill.

The gravity stations are distributed approximately on an evenly spaced grid over the portion of Sevier Desert being considered as a potential siting area for the MX missile. This area is basically restricted to public lands. Stations in surrounding areas are much more irregularly spaced.

The CBA data are reduced to a set of values at the points of a uniformly spaced geographic array, or grid. The gridding process is done using an algorithm which computes a value at each grid point using the gravity station data within a circular area around the grid point. A bell-shaped weighting function assigns greater weight to the nearer data points. The grid-point spacing is chosen to match the average data spacing. A 2-kilometer grid spacing was used for this analysis. Figure 3 shows the CBA contoured from gridded values and the gravity stations used to compute the grid values.

##### 4.1 REGIONAL-RESIDUAL SEPARATION

A fundamental step in gravity interpretation is isolation of the part of the CBA which represents the geologic feature of

interest, in this case the valley fill. The valley fill has a lower density than the bedrock and therefore creates a negative gravity anomaly. The portion of the CBA which corresponds to this alluvial material is called the "residual anomaly."

The CBA contains long-wave-length components from deep and broad geologic structures extending far beyond the valley. These long-wave-length components are called the regional gravity. Shorter wave-length components due to near-surface variations in density are called the residual (anomaly) values. Two methods were used to estimate the regional gravity:

1. Several upward continuation calculations were made to calculate the gravitational field as it would appear at higher elevations; and
2. A second order polynomial surface was calculated to fit the bedrock (Paleozoic sedimentary strata) CBA values around Sevier Desert and Dugway Valley.

The upward continuation was used because the limited number of Paleozoic outcrops in the area and the poor distribution of bedrock stations around Sevier desert do not provide a good basis for second order trend surface calculation. The regional surface used in the model calculations was a composite derived from the two methods. The regional trend was subtracted from the CBA to obtain the residual anomaly. The residual anomaly was used to calculate a simple geologic model which fits the gravity data and is consistent with geologic knowledge from other sources.

#### 4.2 DENSITY SELECTION

The construction of a geologic model from the residual anomaly requires selection of a value for the mean density contrast between basin fill and underlying rock.

Since only very general density information is available, the geologic interpretation of the gravity data can be only a coarse approximation. A one-percent change in the density used for the alluvial fill would result in a four-percent change in the calculated thickness of the fill material.

In order to estimate the density of the valley fill material, density was calculated at 13 shallow boring sites in Sevier Desert. The borings ranged in depth from 101 feet (30 m) to 181 feet (55 m). The average densities from borings ranged from 1.71 g/cm<sup>3</sup> to 2.08 g/cm<sup>3</sup>, with a grand average of 1.98 g/cm<sup>3</sup>. Because the density is expected to increase with depth (the increase in bulk density associated with increasing age and thickness of overburden is discussed by Woolard, 1962 and by Grant and West, 1965), an average fill density of 2.3 g/cm<sup>3</sup> was used.

The basement material underlying the Sevier Desert is thought to be similar to the Paleozoic carbonate rocks which are found in the surrounding mountain ranges. Published values of the densities of carbonate rocks typically range between 2.6 and 2.8 g/cm<sup>3</sup>. The Paleozoic carbonate rocks in Utah are generally reported to be relatively high in density, being on the order of 2.8 g/cm<sup>3</sup>. This value was selected to represent the density of

the basement rock. The density contrast used in the modeling process was therefore  $-0.5 \text{ g/cm}^3$ . This density contrast is further supported by density determinations from a previous gravity study near the center of Sevier Desert Valley in the area of Desert Mountain (Calkins, 1972).

#### 4.3 MODELING

Modeling was done with the aid of a computer program which calculates an iterative three-dimensional solution of gravity anomaly data (Cordell, 1970). The gravity anomaly is represented by discrete values on a two-dimensional grid. The source of the anomaly (the low-density valley fill) is represented by a set of vertical prism elements. The tops of the prisms lie in a common horizontal plane. The bottoms of the prisms collectively represent the bottom of the valley fill. Each prism has a cross-sectional area equal to one grid square and a uniform density. A grid square of 2 kilometers by 2 kilometers was selected as representative of the gravity station distribution. Computation was continued for eight iterations of mutually interactive prism adjustments. The root-mean-square of the differences between the observed CBA nodal values and the gravity values calculated from the model is less than 0.5 milligal.

The calculated thickness of the valley fill depends upon the density contrast (i.e., fill density minus rock density). Because neither density is perfectly known, nor even uniform, the



calculated thickness should be expected to contain a corresponding degree of uncertainty. The calculated thickness of fill, or interpreted depth to rock, is contoured in Drawing 2.

#### 4.4 DISCUSSION OF RESULTS

Gravity data were not obtained in the south central part of the Sevier Desert area nor was the area bounded by observations on bedrock. As a result, the interpreted model is poorly defined over much of the area.

The dominant feature of the mapped area is a broad subsurface high covering the central part of the Sevier Desert area. The alluvial thickness in this area generally is calculated to be less than 1000 feet (305 m). Fumarole Butte and Desert Mountain are included within this region. Fumarole Butte is a late Pleistocene Basaltic lava flow, and Desert Mountain contains Tertiary age granitoid igneous intrusions into Paleozoic meta-sedimentary rocks and Tertiary rhyolites. An aeromagnetic map of Utah (Zietz and others, 1976) shows relatively short wavelength, high-intensity magnetic anomalies throughout this region.

Oil-well data from the southern part of the central high (Smith and others, 1978) indicate that the top of Tertiary volcanics and sedimentary rocks is at about 2000 feet (600 m) deep, and that Paleozoic basement is greater than 8000 feet (2500 m) deep. All of these facts indicate that the central gravity high at least partly reflects the abundance of dense basalts interbedded with the basin fill. Similar aged volcanics in the adjacent

areas did not yield such high gravity values because they are silicic lavas and tuffs with densities similar to alluvial basin fill.

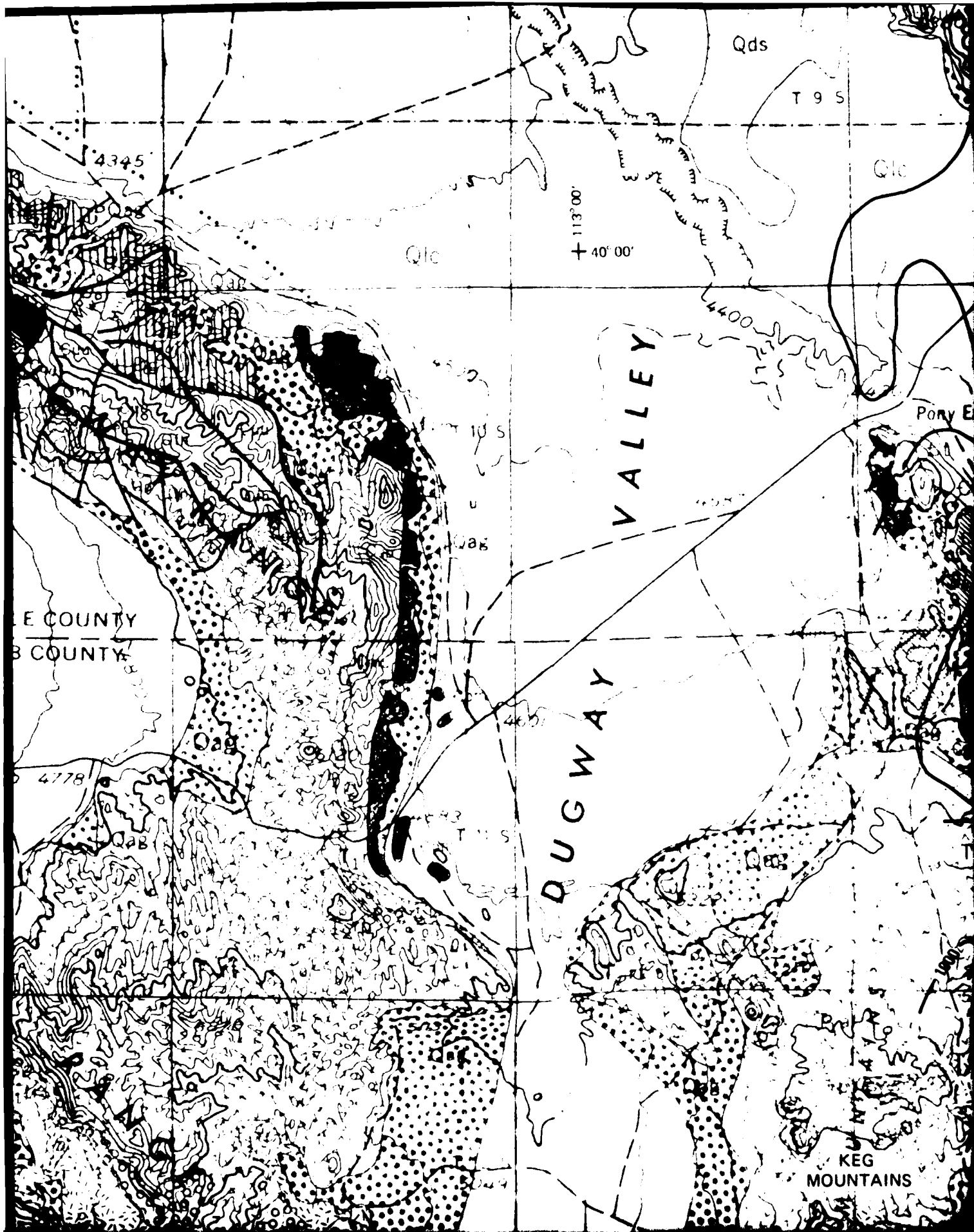
The gravity interpretation shows a narrow graben system separating the central subsurface high from the Keg Mountains to the west and northwest. This system contains two deep narrow basins. Their axes trend north-northeast, and both grabens dip to the north. The axis of the southern basin is about 3 miles (5 km) west of the northern axis. The faults bounding the southern basin are shown (Drawing 2) to extend south so that they pass along the eastern side of the Drum Mountains generally coinciding with surface faults in that area.

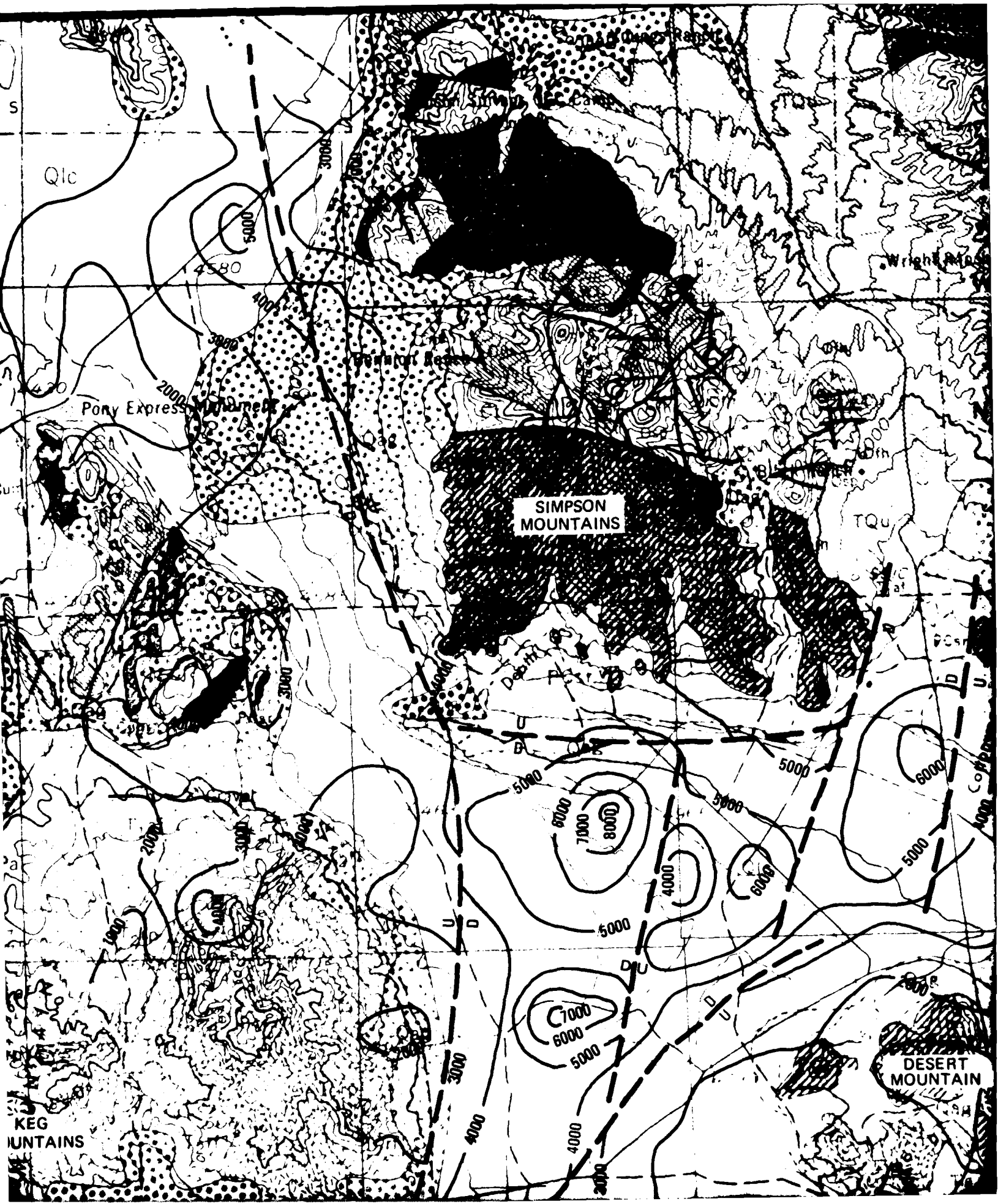
The western and northwestern margin of the central gravity high is interpreted as a long curvilinear fault system but may simply mark the edge of the subsurface basalt flows interbedded with the alluvial basin fill. However, Holocene surface ruptures in alluvium and through the surface basalts of Fumarole Butte suggest a fault system even though the gravity data do not indicate large vertical displacements in this region.

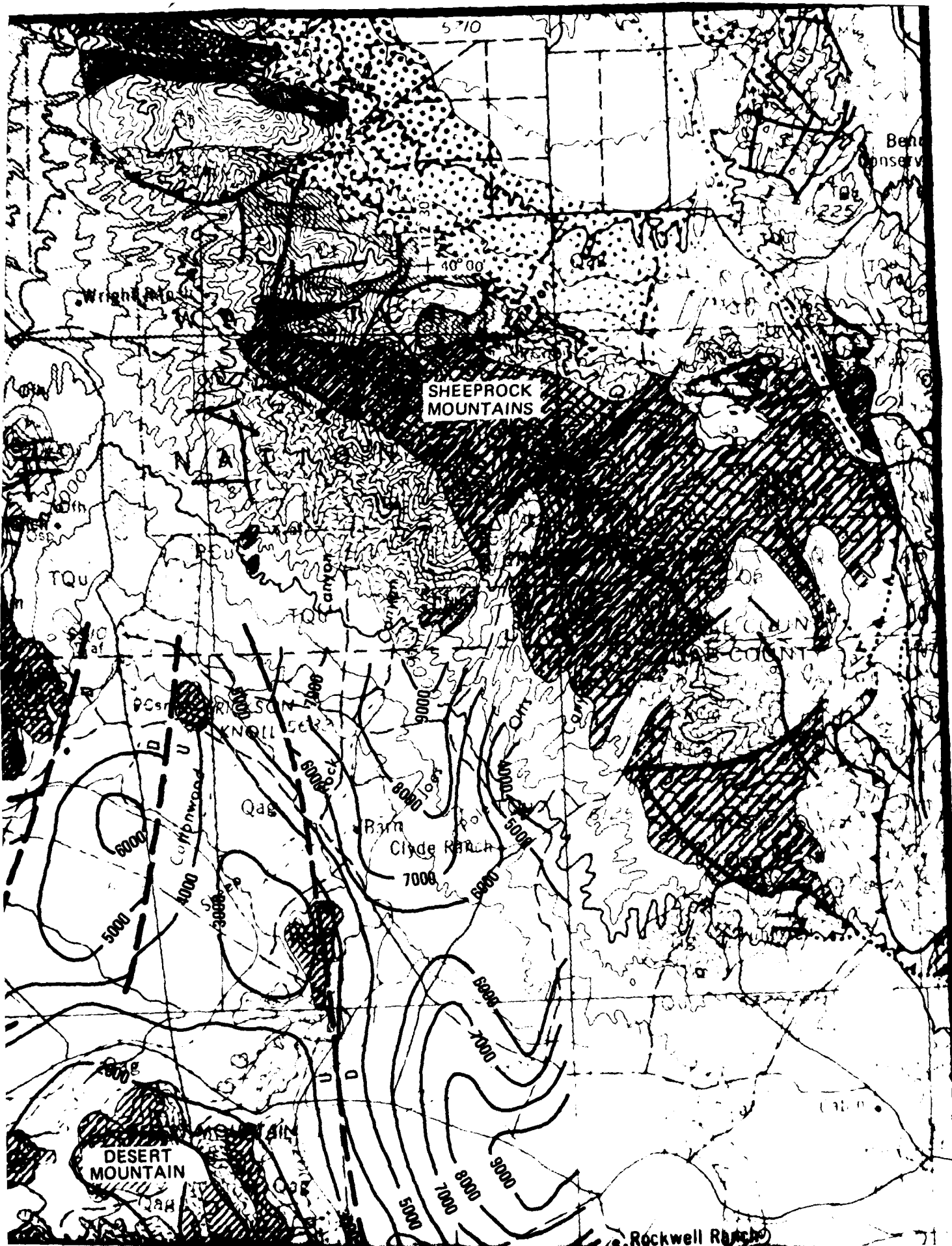
There are no gravity data covering the south-central part of the area shown in Drawing 2, but two factors indicate that the basin fill is very thick in this area. The wild cat oil well (Smith and others, 1978) in this area penetrated interbedded volcanics and alluvial deposits to its total depth of 8000 feet (2500 m) without reaching Paleozoic basement. The limited

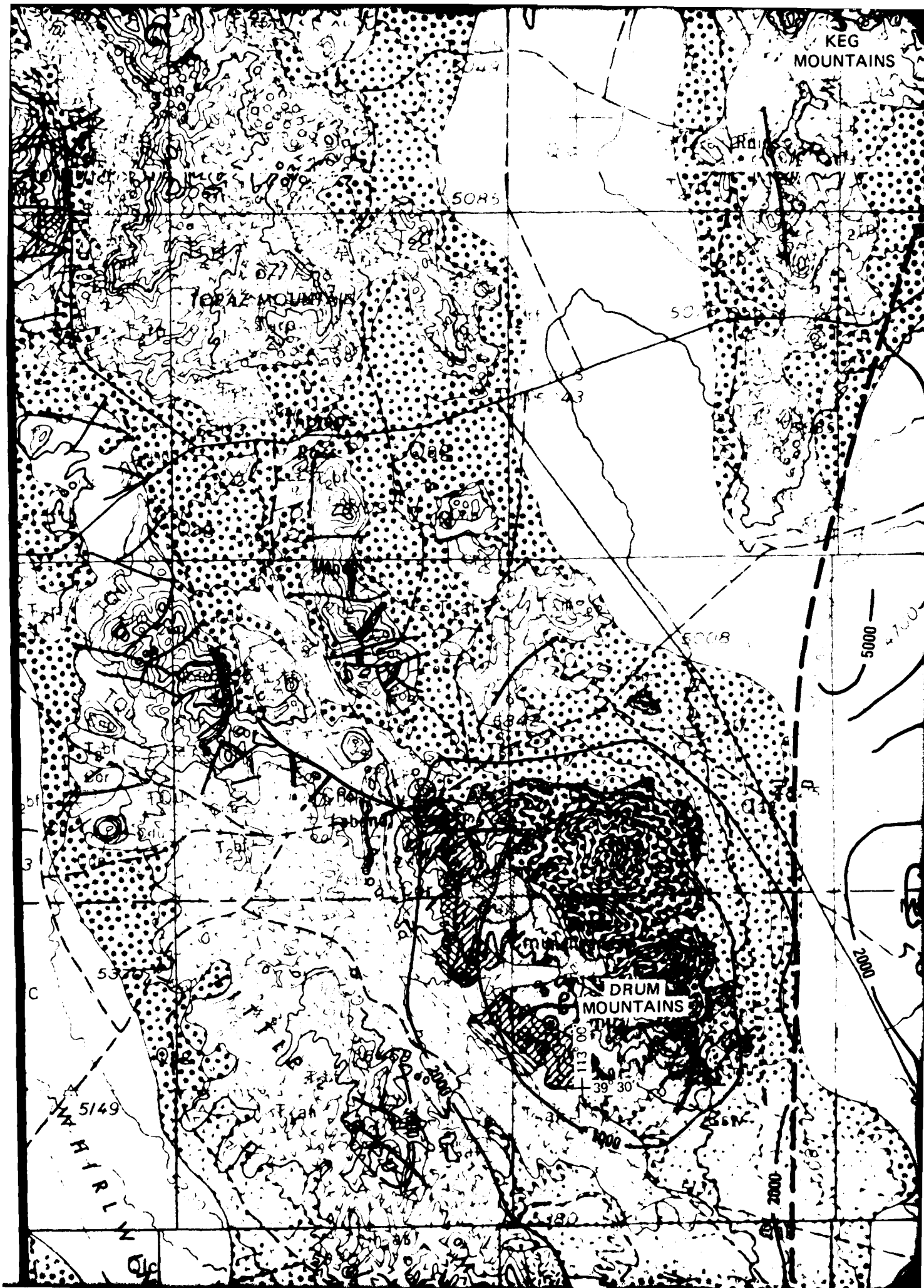
gravity data in the southeastern part of Drawing 2 suggest that the basin floor dips to the southwest.

North and northeast of the central subsurface high, the interpretation shows a complex subsurface structure that includes deep basins associated with the margins of the Simpson and Sheeprock mountains.

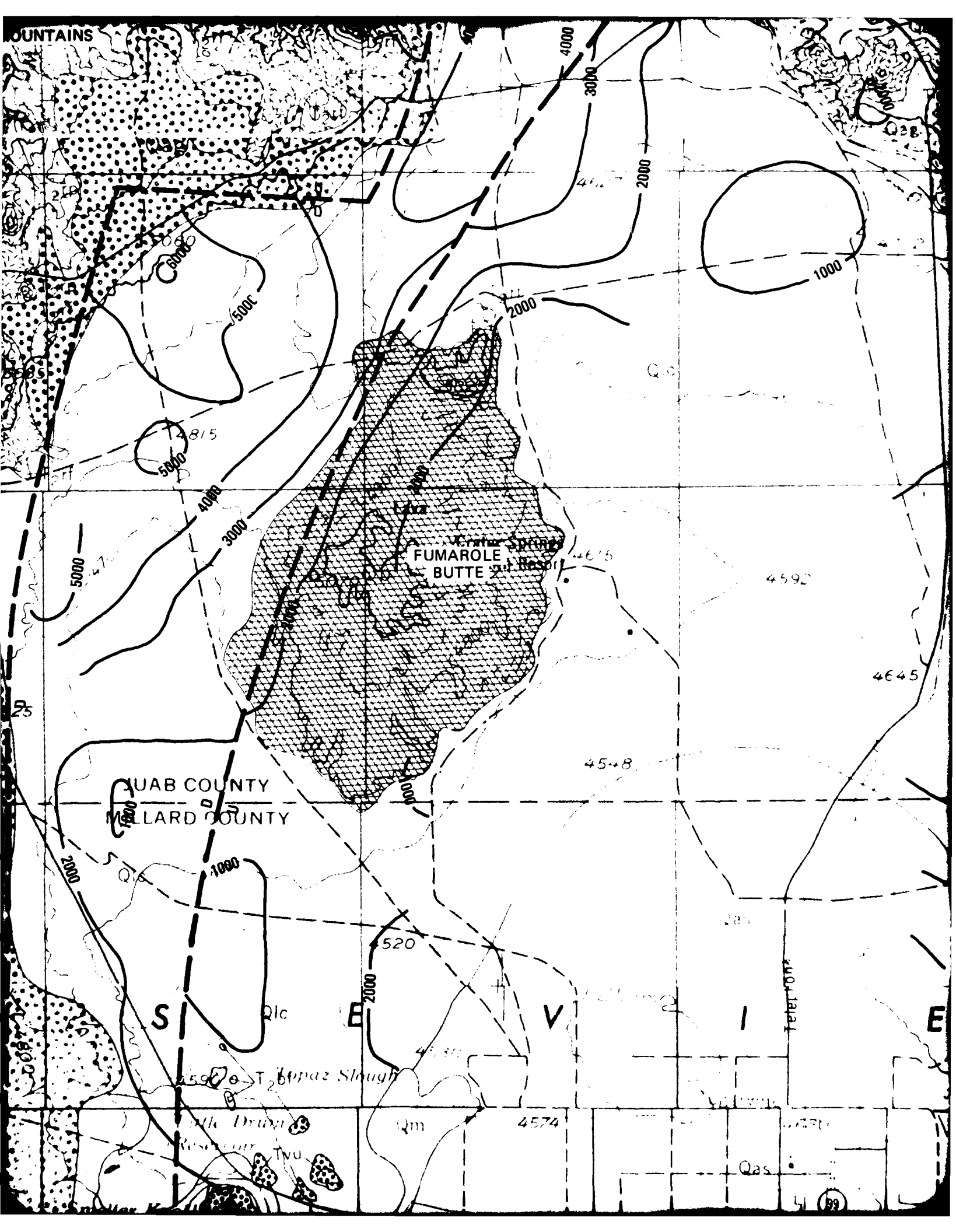








MOUNTAINS



FUMAROLE BUTTE  
Crater Spring  
Resort

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E

T2 Popaz Slough

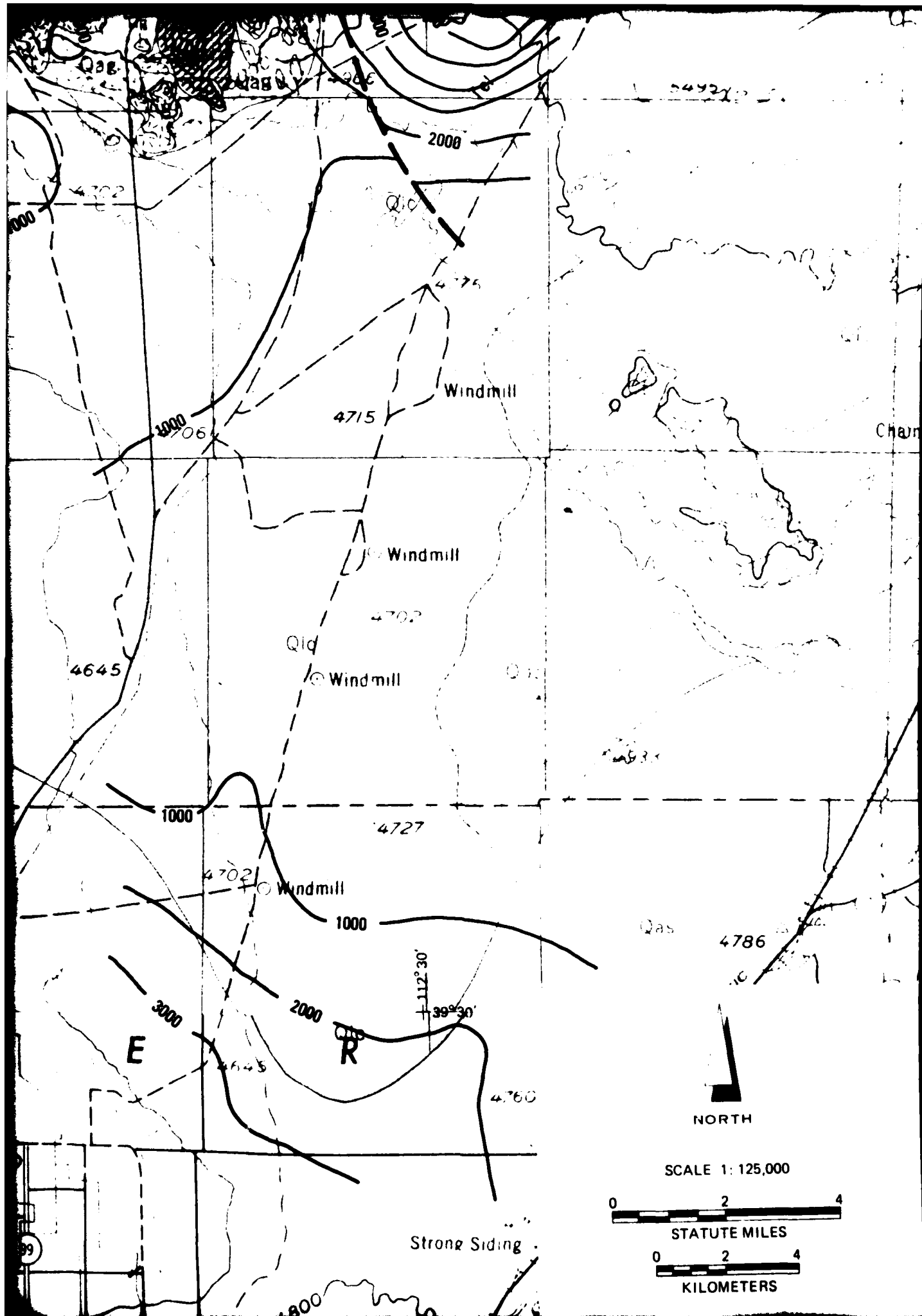
Little Dragon  
Reservoir

Qm

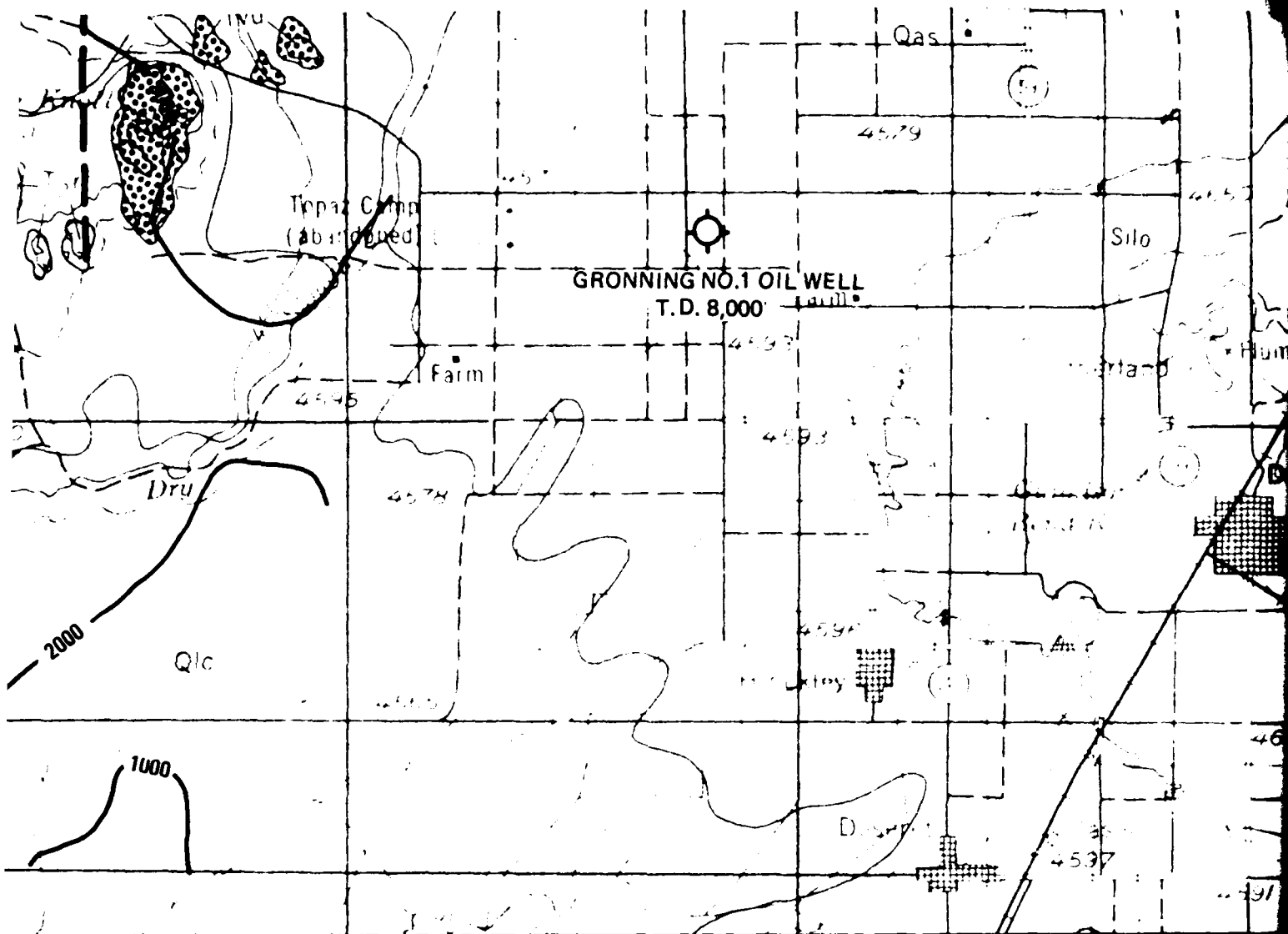
4574

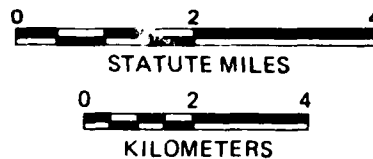
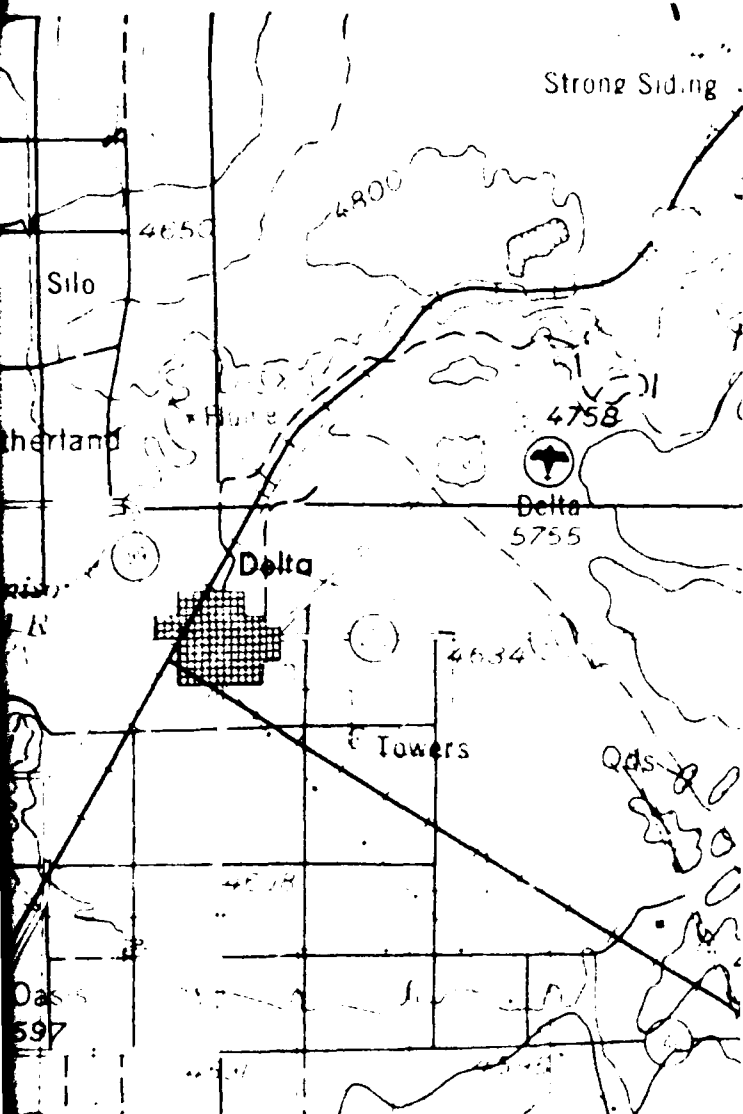
Qas











### EXPLANATION

U/D GRAVITY INFERRED FAULT LOCATIONS

FAULTS SHOWN ON GEOLOGIC BASE MAP

ALLUVIAL MATERIAL

ROCK (ALL PATTERNS)

CONTOUR INTERVAL = 1000 FT

DEPTH CALCULATIONS BASED ON  
DENSITY CONTRAST OF  $-0.5 \text{ g/cm}^3$

GEOLOGIC BASE MAP: L. F. Hintze, 1963

### INTERPRETED DEPTH TO BEDROCK SEVIER DESERT, UTAH

MX SITING INVESTIGATION  
DEPARTMENT OF THE AIR FORCE - BMO

DRAWING  
2

**FUGRO NATIONAL, INC.**

## 5.0 CONCLUSIONS

The interpretation shown in Drawing 2 is consistent with information from photogeology, surface mapping, and published regional geology.

Two factors which adversely affect the results are: 1) the limited areal coverage of the gravity data; and 2) the widespread occurrence of volcanic materials in the section.

It is likely that the alluvium in the central part of the study area overlies or is interbedded with a thick sequence of dense basalts and that the basalt is absent around the edges of the Sevier Desert where the alluvium is interpreted to be several thousand feet thick. Around the edges, the alluvium may be underlain by Paleozoic sedimentary rocks.

The basalts in the central part of the area may mark the location of a fundamental crustal break through which they were extruded.

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APPENDIX A1.0

GENERAL PRINCIPLES OF THE  
GRAVITY EXPLORATION METHOD



A1.0 GENERAL PRINCIPLES OF THE GRAVITY  
EXPLORATION METHOD

A1.1 GENERAL

A gravity survey involves measurement of differences in the gravitational field between various points on the earth's surface. The gravitational field values being measured are the same as those influencing all objects on the surface of the earth. They are generally associated with the force which causes a one-gm mass to be accelerated at  $980 \text{ cm/sec}^2$ . This force is normally referred to as a one-g force.

Even though in many applications the gravitational field at the earth's surface is assumed to be constant, small but distinguishable differences in gravity occur from point to point. In a gravity survey, the variations are measured in terms of milligals. A milligal is equal to  $0.001 \text{ cm/sec}^2$  or  $0.00000102 \text{ g}$ . The differences in gravity are caused by geometrical effects, such as differences in elevation and latitude, and by lateral variations in density within the earth. The lateral density variations are a result of changes in geologic conditions. For measurements at the surface of the earth, the largest factor influencing the pull of gravity is the density of all materials between the center of the earth and the point of measurement.

To detect changes produced by differing geological conditions, it is necessary to detect differences in the gravitational field as small as a few milligals. To recognize changes due to

geological conditions, the measurements are "corrected" to account for changes due to differences in elevation and latitude.

Given this background, the basic concept of the gravitational exploration method, the anomaly, can be introduced. If, instead of being an oblate spheroid characterized by complex density variations, the earth were made up of concentric, homogeneous shells, the gravitational field would be the same at all points on the surface of the earth. The complexities in the earth's shape and material distribution are the reason that the pull of gravity is not the same from place to place. A difference in gravity between two points which is not caused by the effects of known geometrical differences, such as in elevation, latitude, and surrounding terrain, is referred to as an "anomaly."

An anomaly reflects lateral differences in material densities. The gravitational attraction is smaller at a place underlain by relatively low density material than it is at a place underlain by a relatively high density material. The term "negative gravity anomaly" describes a situation in which the pull of gravity within a prescribed area is small compared to the area surrounding it. Low-density alluvial deposits in basins such as those in the Nevada-Utah region produce negative gravity anomalies in relation to the gravity values in the surrounding mountains which are formed by more dense rocks.

The objective of gravity exploration is to deduce the variations in geologic conditions that produce the gravity anomalies identified during a gravity survey.

## A1.2 INSTRUMENTS

The sensing element of a LaCoste and Romberg gravimeter is a mass suspended by a zero-length spring. Deflections of the mass from a null position are proportional to changes in gravitational attraction. These instruments are sealed and compensated for atmospheric pressure changes. They are maintained at a constant temperature by an internal heater element and thermostat. The absolute value of gravity is not measured directly by a gravimeter. It measures relative values of gravity between one point and the next. Gravitational differences as small as 0.01 milligal can be measured.

## A1.3 FIELD PROCEDURES

The gravimeter readings were calibrated in terms of absolute gravity by taking readings twice daily at nearby USGS gravity base stations. Gravimeter readings fluctuate because of small time-related deviations due to the effect of earth tides and instrument drift. Field readings were corrected to account for these deviations. The magnitude of the tidal correction was calculated using an equation suggested by Goguel (1954):

$$C = P + N \cos \phi (\cos \phi + \sin \phi) + S \cos \phi (\cos \phi - \sin \phi)$$

where C is the tidal correction factor, P, N, and S are time-related variables, and  $\phi$  is the latitude of the observation point. Tables giving the values of P, N, and S are published annually by the European Association of Exploration Geophysicists.

The meter drift correction was based on readings taken at a designated base station at the start and end of each day. Any difference between these two readings after they were corrected for tidal effects was considered to have been the result of instrumental drift. It was assumed that this drift occurred at a uniform rate between the two readings. Corrections for drift were typically only a few hundredths of a milligal. Readings corrected for tidal effects and instrumental drift represented the observed gravity at each station. The observed gravity values represent the total gravitational pull of the entire earth at the measurement stations.

#### A1.4 DATA REDUCTION

Several corrections or reductions are made to the observed gravity to isolate the portion of the gravitational pull which is due to the crustal and near-surface materials. The gravity remaining after these reductions is called the "Bouguer Anomaly." Bouguer Anomaly values are the basis for geologic interpretation. To obtain the Bouguer Anomaly, the observed gravity is adjusted to the value it would have had if it had been measured at the geoid, a theoretically defined surface which approximates the surface of mean sea level. The difference between the "adjusted" observed gravity and the gravity at the geoid calculated for a theoretically homogeneous earth is the Bouguer Anomaly.

Four separate reductions, to account for four geometrical effects, are made to the observed gravity at each station to arrive at its Bouguer Anomaly value.

a. Free-Air Effect: Gravitational attraction varies inversely as the square of the distance from the center of the earth. Thus corrections must be applied for elevation. Observed gravity levels are corrected for elevation using the normal vertical gradient of:

$$FA = -0.09406 \text{ mg/ft } (-0.3086 \text{ milligals/meter})$$

where FA is the free-air effect (the rate of change of gravity with distance from the center of the earth). The free-air correction is positive in sign since the correction is opposite the effect.

b. Bouguer Effect: Like the free-air effect, the Bouguer effect is a function of the elevation of the station, but it considers the influence of a slab of earth materials between the observation point on the surface of the earth and the corresponding point on the geoid (sea level). Normal practice, which is to assume that the density of the slab is 2.67 grams per cubic centimeter was followed in these studies. The Bouguer correction ( $B_C$ ), which is opposite in sign to the free-air correction, was defined according to the following formula.

$$B_C = 0.01276 (2.67) h_f \text{ (milligals per foot)}$$

$$B_C = 0.04185 (2.67) h_m \text{ (milligals per meter)}$$

where  $h_f$  is the height above sea level in feet and  $h_m$  is the height in meters.

c. Latitude Effect: Points at different latitudes will have different "gravities" for two reasons. The earth (and the geoid) is spheroidal, or flattened at the poles. Since points at higher latitudes are closer to the center of the earth than points near the equator, the gravity at the higher latitudes is larger. As the earth spins, the centrifugal acceleration causes a slight decrease in gravity. At the higher latitudes where the earth's radii are smaller, the centrifugal acceleration diminishes. The gravity formula for the Geodetic Reference System, 1967, gives the theoretical value of gravity at the geoid as a function of latitude. It is:

$$g = 978.0381 (1 + 0.0053204 \sin^2 \phi - 0.0000058 \sin^2 2\phi) \text{ gals}$$
where  $g$  is the theoretical acceleration of gravity and  $\phi$  is the latitude in degrees. The positive term accounts for the spheroidal shape of the earth. The negative term adjusts for the centrifugal acceleration.

The previous two corrections (free air and Bouguer) have adjusted the observed gravity to the value it would have had at the geoid (sea level). The theoretical value at the geoid for the latitude of the station is then subtracted from the adjusted observed gravity. The remainder is called the Simple Bouguer Anomaly (SBA). Most of this gravity represents the effect of material beneath the station, but part of it may be due to irregularities in terrain (upper part of the Bouguer slab) away from the station.

d. Terrain Effect: Topographic relief around the station has a negative effect on the gravitational force at the station. A nearby hill has upward gravitational pull and a nearby valley contributes less downward attraction than a nearby material would have. Therefore, the corrections are always positive. Corrections are made to the SBA when the terrain effects were 0.1 milligal or larger. Terrain corrected Bouguer values are called the Complete Bouguer Anomaly (CBA). When the CBA is obtained, the reduction of gravity at individual measurement points (stations) is complete.

#### A1.5 INTERPRETATION

The first step in interpretation is to separate the portion of the CBA that might be caused by the light-weight, basin-fill material overlying the heavier bedrock material which forms the surrounding mountains and presumably the basin floor. Since the valley-fill sediments are absent at the stations read in the mountains, the CBA values at bedrock stations are used as the basis for constructing a second order polynomial surface to represent a regional field over the valley. A regional field is an estimation of the values the CBA would have had if the light-weight sediments (the anomaly) had not been there.

Where there are insufficient bedrock stations to define a satisfactory regional trend, a regional may be estimated by the process of upward continuation of the CBA field.

In Potential Theory, a field normal to a surface, regardless of its actual source, may be considered as originating in an areal

distribution of mass on that surface, and if the field strength is known the surface density of mass (grams per square centimeter) can be calculated. The observed gravity field at the surface of the earth approximately fulfills the requirements of this theory: thus the observed (Bouguer anomaly) field can be used to compute a surficial distribution of mass which would reproduce the field, and most importantly, account for the gravity field anywhere above the surface of observation. On this basis, the Bouguer anomaly field is readily "continued" to level surfaces above the ground.

An important property of such "upward continuation" is that the resultant field (which can be represented by a contour map), with increasing altitudes of continuation, changes more with respect to shallow sources than it does with respect to deeper sources. The anomalous parts of the field ascribed to shallow density distributions tend to vanish as the continuation is carried upward whereas the field produced by deeper sources changes only slightly, so that upward continuations produce "regional"-type fields. Residual separations then can be made for the purpose of "pin-pointing" shallow sources such as the alluvial fill.

The difference between the CBA and the regional field is called the "residual" field or residual anomaly. The residual field is the interpreter's estimation of the gravitational effect of the geologic anomaly. The zero value of the residual anomaly is not exactly at the rock outcrop line but at some distance on the "rock" side of the contact. The reason for this is found in the



explanation of the terrain effect. There is a component of gravitational attraction from material which is not directly beneath a point.

If the "regional" is well chosen, the magnitude of the residual anomaly is a function of the thickness of the anomalous (fill) material and the density contrast. The density contrast is the difference in density between the alluvial and bedrock material. If this contrast were known, an accurate calculation of the thickness could be made. In most cases, the densities are not well known and they also vary within the study area. In these cases, it is necessary to use typical densities for materials similar to those in the study area.

If the selected average density contrast is smaller than the actual density contrast, the computed depth to bedrock will be greater than the actual depth and vice-versa. The computed depth is inversely proportional to the density contrast. A ten percent error in density contrast produces a ten percent error in computed depth. An iterative computer program is used to calculate a subsurface model which will yield a gravitational field to match (approximately) the residual gravity anomaly.

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM       | ORSV<br>GRAV | THEO<br>GRAV | FAA | CHA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|--------------|-------------------|--------------|--------------|-----|--------------|
| SD0204            | 394274          | 1123442          | 4777V          | 0                  | 76439680     | 36510168664214336 | -714         | 83065        |     |              |
| SD0205            | 394187          | 1123385          | 4732U          | 0                  | 62439518     | 36589168862214207 | -816         | 83107        |     |              |
| SD0206            | 394099          | 1123385          | 4703U          | 0                  | 55439355     | 36586168678214077 | -1141        | 82873        |     |              |
| SD0207            | 394267          | 1123324          | 4803Y          | 0                  | 67439665     | 36679168589214326 | -534         | 83148        |     |              |
| SD0208            | 394372          | 1123314          | 4898Y          | 0                  | 88439859     | 36696168156214481 | -232         | 83150        |     |              |
| SD0210            | 394443          | 1122860          | 5001B          | 0                  | 73439979     | 37347165782214587 | -1742        | 81274        |     |              |
| SD0211            | 394374          | 1122759          | 4995S          | 0                  | 75439849     | 37489166775214484 | -703         | 82335        |     |              |
| SD0212            | 394374          | 1122987          | 4928S          | 0                  | 67439854     | 37164166800214484 | -1309        | 81950        |     |              |
| SD0213            | 394274          | 1122877          | 4900S          | 0                  | 66439667     | 37318167720214336 | -505         | 82849        |     |              |
| SD0214            | 394185          | 1122989          | 4834S          | 0                  | 60439505     | 37155168822214205 | 106          | 83681        |     |              |
| SD0215            | 394187          | 1122761          | 4904S          | 0                  | 74439503     | 37481168445214207 | 387          | 83735        |     |              |
| SD0217            | 393701          | 1124973          | 4957U          | 0                  | 66438662     | 34301166261213488 | -578         | 82581        |     |              |
| SD0220            | 393549          | 1124920          | 4886U          | 0                  | 54438379     | 34371166688213263 | -594         | 82795        |     |              |
| SD0222            | 393449          | 1124808          | 4858U          | 0                  | 49438191     | 34528166758213114 | -640         | 82840        |     |              |
| SD0224            | 393316          | 1124849          | 4738V          | 0                  | 44437946     | 34464167429212918 | -900         | 82984        |     |              |
| SD0225            | 394464          | 1123262          | 5154Y          | 0                  | 96440027     | 36774166541214618 | 426          | 82904        |     |              |
| SD0226            | 394372          | 1123217          | 4905Y          | 0                  | 75439856     | 36835168116214481 | -206         | 83139        |     |              |
| SD0227            | 394086          | 1123103          | 4750U          | 0                  | 56439324     | 36489169114214058 | -244         | 83611        |     |              |
| SD0228            | 394274          | 1123102          | 4856V          | 0                  | 63439672     | 36996168476214336 | -163         | 83338        |     |              |
| SD0229            | 394467          | 1123065          | 4966Y          | 0                  | 73440028     | 37055166506214622 | -1383        | 81752        |     |              |
| SD0230            | 394177          | 1123229          | 4760Y          | 0                  | 59439496     | 36812168800214192 | -599         | 83225        |     |              |
| SD0233            | 393988          | 1123148          | 4719Y          | 0                  | 51439144     | 36921169475213913 | -30          | 83926        |     |              |
| SD0234            | 393899          | 1123077          | 47211T         | 0                  | 50438978     | 37020169586213780 | 232          | 84180        |     |              |
| SD0235            | 393819          | 1123037          | 4745Y          | 0                  | 49438829     | 37075168864213663 | -145         | 83720        |     |              |
| SD0236            | 393795          | 1123209          | 4726S          | 0                  | 46438789     | 36828168857213627 | -296         | 83631        |     |              |
| SD0237            | 393889          | 1123216          | 4686S          | 0                  | 48438963     | 36821169646213766 | -22          | 84043        |     |              |
| SD0238            | 394001          | 1123302          | 4695S          | 0                  | 53439172     | 36702168969213932 | -781         | 83259        |     |              |
| SD0239            | 394033          | 1123442          | 4675Y          | 0                  | 52439235     | 36503168735213979 | -1250        | 82857        |     |              |
| SD0240            | 393895          | 1123386          | 4662S          | 0                  | 48438978     | 36578169094213775 | -809         | 83338        |     |              |
| SD0241            | 393797          | 1123357          | 4684S          | 0                  | 45438796     | 36616169130213630 | -421         | 83646        |     |              |
| SD0242            | 393790          | 1123520          | 4651S          | 0                  | 45438787     | 36383169248213620 | -602         | 83579        |     |              |
| SD0243            | 393894          | 1123545          | 4638Y          | 0                  | 46438980     | 36351169067213773 | -1061        | 83166        |     |              |
| SD0244            | 394012          | 1123555          | 4644Y          | 0                  | 50439199     | 36340168905213948 | -1341        | 82869        |     |              |
| SD0245            | 393940          | 1123682          | 4621Y          | 0                  | 46439069     | 36156168954213841 | -1402        | 82883        |     |              |
| SD0246            | 393838          | 1123667          | 4624Y          | 0                  | 44438880     | 36174169057213691 | -1120        | 83153        |     |              |
| SD0247            | 393453          | 1123620          | 4612U          | 0                  | 40438166     | 36229168929213120 | -791         | 83519        |     |              |
| SD0248            | 393290          | 1123598          | 4630U          | 0                  | 39437864     | 36255168099212879 | -1210        | 83037        |     |              |
| SD0249            | 393021          | 1123653          | 46289T         | 0                  | 38437368     | 36167166384212481 | -2536        | 81714        |     |              |
| SD0250            | 393089          | 1123534          | 4665U          | 0                  | 40437491     | 36340166858212582 | -1824        | 82305        |     |              |
| SD0251            | 393184          | 1123554          | 4664U          | 0                  | 40437667     | 36315167336212722 | -1496        | 82837        |     |              |
| SD0252            | 393396          | 1123515          | 4635U          | 0                  | 42438058     | 36377168825213036 | -593         | 83840        |     |              |
| SD0253            | 393576          | 1123554          | 4637U          | 0                  | 43438392     | 36327169003213302 | -663         | 83564        |     |              |
| SD0254            | 393683          | 1123497          | 4692U          | 0                  | 43438589     | 36413168839213461 | -468         | 83572        |     |              |
| SD0255            | 393489          | 1123441          | 4723U          | 0                  | 42438228     | 36486168110213173 | -617         | 83316        |     |              |
| SD0256            | 393315          | 1123442          | 4663V          | 0                  | 41437906     | 36479168239212916 | -796         | 83341        |     |              |
| SD0257            | 393175          | 1123424          | 4692U          | 0                  | 40437647     | 36501167356212709 | -1199        | 82834        |     |              |
| SD0258            | 393068          | 1123384          | 47001T         | 0                  | 41437448     | 36554166884212551 | -1437        | 82574        |     |              |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>M | EAST<br>M         | ORSV<br>GRAV | THEO<br>GRAV | FAA   | GRA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|------------|-------------------|--------------|--------------|-------|--------------|
| SD0259            | 393185          | 1123336          | 47390          | 0                  | 44437063   | 36027167277212723 |              |              | -849  | 83031        |
| SD0260            | 393270          | 11233194         | 47392          | 0                  | 43437820   | 36054167508212849 |              |              | -745  | 83134        |
| SD0261            | 393426          | 1123390          | 47320          | 0                  | 43438110   | 36557167843213080 |              |              | -706  | 83197        |
| SD0262            | 393613          | 1123360          | 46890          | 0                  | 43438456   | 36006168784213357 |              |              | -448  | 83602        |
| SD0263            | 393703          | 1123357          | 46970          | 0                  | 44438622   | 36013168980213491 |              |              | -310  | 83714        |
| SD0264            | 393664          | 1123214          | 47230          | 0                  | 45438546   | 36817168670213433 |              |              | -317  | 83620        |
| SD0265            | 393577          | 1123215          | 47210          | 0                  | 44438385   | 36813168383213304 |              |              | -494  | 83448        |
| SD0266            | 393476          | 1123241          | 47230          | 0                  | 43438199   | 36772168131213155 |              |              | -578  | 83356        |
| SD0267            | 393365          | 1123275          | 47300          | 0                  | 42437995   | 36720167816212990 |              |              | -663  | 83247        |
| SD0268            | 393227          | 1123216          | 47500          | 0                  | 43437738   | 36800167553212786 |              |              | -532  | 83310        |
| SD0269            | 393140          | 1123217          | 47460          | 0                  | 43437577   | 36796167302212657 |              |              | -693  | 83162        |
| SD0270            | 393053          | 1123216          | 47500          | 0                  | 44437416   | 36795166749212526 |              |              | -1079 | 82764        |
| SD0271            | 393142          | 1123102          | 47500          | 0                  | 43437578   | 36961167390212660 |              |              | -570  | 83272        |
| SD0272            | 393307          | 1123132          | 47360          | 0                  | 43437884   | 36923167958212904 |              |              | -378  | 83511        |
| SD0273            | 393439          | 1123161          | 47230          | 0                  | 43438129   | 36886168077213100 |              |              | -577  | 83357        |
| SD0274            | 393489          | 1123105          | 47080          | 0                  | 43438220   | 36967168226213173 |              |              | -643  | 83343        |
| SD0275            | 393598          | 1123103          | 47170          | 0                  | 45438422   | 36974168591213335 |              |              | -355  | 83602        |
| SD0276            | 393689          | 1123106          | 47100          | 0                  | 46438590   | 36972168915213470 |              |              | -231  | 83750        |
| SD0277            | 394012          | 1122987          | 47478          | 0                  | 55439185   | 37152169242213948 |              |              | -34   | 83830        |
| SD0278            | 393923          | 11229384         | 47500          | 0                  | 53439019   | 37220169077213816 |              |              | -41   | 83811        |
| SD0280            | 393577          | 1122991          | 47415          | 0                  | 46438380   | 37133168389213304 |              |              | -300  | 83576        |
| SD0281            | 393403          | 1122990          | 47425          | 0                  | 44438058   | 37129168107213046 |              |              | -315  | 83555        |
| SD0282            | 393227          | 1122991          | 47585          | 0                  | 44437733   | 37122167825212786 |              |              | -186  | 83630        |
| SD0283            | 393052          | 1122992          | 47465          | 0                  | 44437409   | 37116166901212527 |              |              | -963  | 82893        |
| SD0284            | 393139          | 1122879          | 47505          | 0                  | 46437567   | 37280167334212655 |              |              | -622  | 83224        |
| SD0285            | 393315          | 1122878          | 47585          | 0                  | 45437893   | 37287168105212916 |              |              | -36   | 83781        |
| SD0286            | 393491          | 1122882          | 47505          | 0                  | 46438218   | 37287168244213177 |              |              | -233  | 83612        |
| SD0287            | 393663          | 1122883          | 47605          | 0                  | 48438537   | 37290168777213431 |              |              | 140   | 83053        |
| SD0288            | 393837          | 1122878          | 47535          | 0                  | 53438656   | 37303169018213689 |              |              | 57    | 83699        |
| SD0289            | 394012          | 1122763          | 48505          | 0                  | 60439179   | 37473168763213948 |              |              | 456   | 83974        |
| SD0290            | 393926          | 1122764          | 48025          | 0                  | 61439020   | 37469168987213821 |              |              | 356   | 84039        |
| SD0291            | 393754          | 1122770          | 47718          | 0                  | 52438702   | 37455168807213560 |              |              | 139   | 83918        |
| SD0292            | 393584          | 1122770          | 47615          | 0                  | 49438388   | 37450168508213314 |              |              | 3     | 83868        |
| SD0293            | 393410          | 1122769          | 47705          | 0                  | 46438066   | 37446168499213057 |              |              | 331   | 84106        |
| SD0294            | 393234          | 1122768          | 47785          | 0                  | 46437740   | 37442167991212796 |              |              | 161   | 83911        |
| SD0295            | 393057          | 1122768          | 47665          | 0                  | 47437413   | 37437166873212534 |              |              | -808  | 82983        |
| SD0296            | 393145          | 1122653          | 47778          | 0                  | 48437573   | 37604167438212665 |              |              | -273  | 83482        |
| SD0297            | 393322          | 1122631          | 47865          | 0                  | 48437900   | 37641168584212927 |              |              | 697   | 84421        |
| SD0298            | 393497          | 1122632          | 47715          | 0                  | 49438224   | 37645168349213185 |              |              | 61    | 83836        |
| SD0299            | 393654          | 11226624         | 47631          | 0                  | 53438515   | 37606168579213418 |              |              | -16   | 83791        |
| SD0300            | 393844          | 1122641          | 48765          | 0                  | 59438866   | 37642168286213699 |              |              | 473   | 83901        |
| SD0301            | 393584          | 1122521          | 47875          | 0                  | 54438382   | 37806168316213314 |              |              | 50    | 83777        |
| SD0303            | 393410          | 1122519          | 47825          | 0                  | 50438060   | 37804168434213057 |              |              | 378   | 84118        |
| SD0304            | 393231          | 1122541          | 47698          | 0                  | 50437730   | 37767167836212791 |              |              | -77   | 83707        |
| SD0305            | 393056          | 1122541          | 47745          | 0                  | 52437406   | 37762167107212533 |              |              | -500  | 83269        |
| SD0306            | 393144          | 1122427          | 47805          | 0                  | 53437566   | 37926167122212663 |              |              | -559  | 83101        |
| SD0307            | 393323          | 1122408          | 47775          | 0                  | 52437897   | 3796016777212926  |              |              | -197  | 83562        |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | FLPV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM       | OBSV<br>GRAV | THEO<br>GRAV | FAA   | CHA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|--------------|-------------------|--------------|--------------|-------|--------------|
| SD0308            | 393502          | 112239           | 347831T        | 0                  | 55438228     | 37987168200213193 |              |              | 18    | 83759        |
| SD0310            | 393401          | 112229           | 647812T        | 0                  | 56438039     | 38123167971213044 |              |              | -81   | 83669        |
| SD0311            | 393230          | 1122315          | 4786S          | 0                  | 55437723     | 38091167016212791 |              |              | -736  | 82996        |
| SD0312            | 393410          | 112207           | 248169T        | 0                  | 67438050     | 38444167660213057 |              |              | -66   | 83572        |
| SD0313            | 393278          | 112215           | 447851T        | 0                  | 61437808     | 38323167131212862 |              |              | -701  | 83040        |
| SD0314            | 392968          | 112265           | 44779H         | 0                  | 49437246     | 37597166712212402 |              |              | -717  | 83032        |
| SD0315            | 392883          | 112254           | 247820         | 0                  | 57437086     | 37755166828212277 |              |              | -448  | 83299        |
| SD0316            | 392739          | 1122630          | 4779D          | 0                  | 58436822     | 37625166601212064 |              |              | -490  | 83268        |
| SD0317            | 392631          | 112278           | 947664T        | 0                  | 51436625     | 37394166215211904 |              |              | -834  | 82960        |
| SD0318            | 392794          | 1122770          | 4778D          | 0                  | 49436926     | 37426166265212145 |              |              | -916  | 82836        |
| SD0319            | 392881          | 1122769          | 4778D          | 0                  | 48437087     | 37430166352212274 |              |              | -959  | 82793        |
| SD0320            | 392966          | 1122881          | 4765D          | 0                  | 45437247     | 37272166400212400 |              |              | -1159 | 82634        |
| SD0321            | 392792          | 1122882          | 4764D          | 0                  | 46436925     | 37265166113212142 |              |              | -1197 | 82600        |
| SD0322            | 392687          | 1122996          | 4758H          | 0                  | 46436734     | 37099165812211987 |              |              | -1419 | 82406        |
| SD0323            | 392879          | 1122993          | 4750S          | 0                  | 44437089     | 37109166250212271 |              |              | -1321 | 82522        |
| SD0324            | 392966          | 1123105          | 4736U          | 0                  | 43437253     | 36951166573212400 |              |              | -1257 | 82633        |
| SD0325            | 392792          | 1123106          | 4733U          | 0                  | 44436931     | 36944165986212142 |              |              | -1616 | 82285        |
| SD0326            | 392592          | 1123053          | 4759U          | 0                  | 47436560     | 37014165619211846 |              |              | -1442 | 82373        |
| SD0327            | 392682          | 1123173          | 4750S          | 0                  | 44436729     | 36845165570211980 |              |              | -1710 | 82133        |
| SD0328            | 392879          | 1123217          | 4737U          | 0                  | 42437094     | 36788166087212271 |              |              | -1607 | 82279        |
| SD0329            | 392966          | 1123330          | 4726U          | 0                  | 42437258     | 36629166248212400 |              |              | -1678 | 82245        |
| SD0330            | 392792          | 1123330          | 4657U          | 0                  | 42436936     | 36623166179212142 |              |              | -2139 | 82019        |
| SD0331            | 392879          | 1123462          | 4639U          | 0                  | 39437100     | 36437166271212271 |              |              | -2345 | 81872        |
| SD0332            | 392966          | 1123554          | 4645U          | 0                  | 39437264     | 36307166327212400 |              |              | -2362 | 81835        |
| SD0333            | 395320          | 1124117          | 5623S          | 0                  | 298441633    | 35582163738215887 |              |              | 770   | 81889        |
| SD0011            | 395949          | 1124901          | 4778S          | 0                  | 185442818    | 3448917031216820  |              |              | -1547 | 82342        |
| SD0015            | 395838          | 1124979          | 4752S          | 0                  | 141442615    | 34374170802216655 |              |              | -1136 | 82798        |
| SD0016            | 395855          | 1124862          | 4960S          | 0                  | 176442643    | 34541169127216680 |              |              | -878  | 82383        |
| SD0017            | 395895          | 1124749          | 5227S          | 0                  | 255442714    | 34703167440216740 |              |              | -109  | 82318        |
| SD0018            | 395831          | 1124542          | 6097S          | 0                  | 434442590    | 34995162168216645 |              |              | 2908  | 82545        |
| SD0019            | 395773          | 1124775          | 5202S          | 0                  | 214442489    | 34662167433216559 |              |              | -172  | 82299        |
| SD0020            | 395768          | 1124894          | 4920S          | 0                  | 166442483    | 34492169595216552 |              |              | -657  | 82726        |
| SD0023            | 395684          | 1124791          | 5161S          | 0                  | 194442325    | 34635167503216427 |              |              | -354  | 82237        |
| SD0024            | 395614          | 1124921          | 4808S          | 0                  | 156442199    | 34448169699216323 |              |              | -1378 | 82379        |
| SD0027            | 395533          | 1124839          | 4869S          | 0                  | 169442047    | 34561169061216203 |              |              | -1321 | 82241        |
| SD0028            | 395566          | 1124725          | 5225C          | 0                  | 219442105    | 34725168881216252 |              |              | -199  | 82199        |
| SD0030            | 395473          | 1124671          | 5219C          | 0                  | 231441931    | 34799166695216114 |              |              | -302  | 82127        |
| SD0031            | 395424          | 1124792          | 4715C          | 0                  | 197441844    | 34624169786216041 |              |              | -1886 | 82230        |
| SD0032            | 395447          | 1124904          | 4533C          | 0                  | 174441890    | 34466171139216076 |              |              | -2279 | 82434        |
| SD0033            | 395405          | 1124602          | 5219C          | 0                  | 268441804    | 34894166651216013 |              |              | -246  | 82221        |
| SD0034            | 395306          | 1124653          | 4776C          | 0                  | 236441622    | 34818169158215866 |              |              | -1765 | 82175        |
| SD0035            | 395321          | 1124784          | 4581C          | 0                  | 175441653    | 34632170502215886 |              |              | -2278 | 82273        |
| SD0036            | 395314          | 1124897          | 4549S          | 0                  | 148441644    | 34471171174215878 |              |              | -1896 | 82736        |
| SD0038            | 395296          | 1124487          | 5209S          | 0                  | 210441599    | 35054166190215852 |              |              | -641  | 81803        |
| SD0039            | 395321          | 1124344          | 5440S          | 0                  | 257441641    | 35254164707215888 |              |              | 14    | 81717        |
| SD0042            | 395333          | 1123892          | 5510S          | 0                  | 236441651    | 35904164671215906 |              |              | 619   | 82062        |
| SD0043            | 395354          | 1123681          | 5399S          | 0                  | 166441684    | 36205165163215936 |              |              | 35    | 81781        |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELFV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM       | OBSV<br>GRAV | THEO<br>GRAV | FAA | CBA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|--------------|-------------------|--------------|--------------|-----|--------------|
| SD0044            | 395422          | 1123554          | 5460S          | 0                  | 162441807    | 36388164496216038 | -159         | 81381        |     |              |
| SD0045            | 395423          | 1123361          | 5652S          | 0                  | 187441804    | 36663163244216040 | 396          | 81305        |     |              |
| SD0046            | 395457          | 1123176          | 5980S          | 0                  | 248441862    | 36928160943216091 | 1133         | 80984        |     |              |
| SD0048            | 395331          | 1123193          | 5632S          | 0                  | 191441630    | 36900162513215903 | -387         | 80595        |     |              |
| SD0049            | 395262          | 1123359          | 5377S          | 0                  | 140441506    | 36661165078215801 | -121         | 81680        |     |              |
| SD0050            | 395323          | 1123535          | 5342S          | 0                  | 142441623    | 36412165287215691 | -332         | 81590        |     |              |
| SD0053            | 395073          | 1122757          | 5837Y          | 0                  | 201441142    | 37513161909215520 | 1322         | 81615        |     |              |
| SD0054            | 395035          | 1122923          | 5563Y          | 0                  | 147441075    | 37275163039215464 | -77          | 81096        |     |              |
| SD0056            | 394830          | 1122909          | 5312Y          | 0                  | 108440696    | 37289163845215160 | -1325        | 80665        |     |              |
| SD0057            | 394806          | 1122811          | 5355Y          | 0                  | 115440649    | 37428163700215125 | -1029        | 80621        |     |              |
| SD0058            | 394698          | 1122952          | 5154Y          | 0                  | 90440453     | 37224164479214965 | -1983        | 80529        |     |              |
| SD0059            | 394723          | 1122758          | 5318Y          | 0                  | 101440494    | 37501163597215002 | -1357        | 80605        |     |              |
| SD0061            | 394636          | 1122872          | 5145Y          | 0                  | 87440336     | 37336164334214873 | -2120        | 80419        |     |              |
| SD0062            | 394550          | 1122759          | 5119Y          | 0                  | 85440174     | 37495164462214745 | -2110        | 80516        |     |              |
| SD0063            | 394511          | 1122952          | 5014Y          | 0                  | 76440107     | 37218165543214688 | -1950        | 81016        |     |              |
| SD0064            | 395210          | 1123033          | 5750Y          | 0                  | 169441402    | 37124161569215724 | -41          | 80517        |     |              |
| SD0065            | 395169          | 1123240          | 5385Y          | 0                  | 135441331    | 36827164748215663 | -237         | 81531        |     |              |
| SD0066            | 395147          | 1123462          | 5201S          | 0                  | 115441296    | 36510166186215630 | -498         | 81677        |     |              |
| SD0067            | 395222          | 1123589          | 5206Y          | 0                  | 124441438    | 36332165637215741 | -1112        | 81256        |     |              |
| SD0068            | 395131          | 1123711          | 5078Y          | 0                  | 113441273    | 36155166574215607 | -1245        | 81548        |     |              |
| SD0069            | 395085          | 1123572          | 5093Y          | 0                  | 108441184    | 36351166303215538 | -1307        | 81431        |     |              |
| SD0070            | 395079          | 1123321          | 5282S          | 0                  | 114441167    | 36709165947215530 | 127          | 82230        |     |              |
| SD0071            | 395117          | 1123045          | 5582Y          | 0                  | 151441230    | 37104162673215586 | -380         | 80732        |     |              |
| SD0072            | 395056          | 1123148          | 5406Y          | 0                  | 125441120    | 36955163717215495 | -903         | 80784        |     |              |
| SD0074            | 395027          | 1123475          | 5102Y          | 0                  | 103441074    | 36488166610215452 | -829         | 81673        |     |              |
| SD0075            | 395003          | 1123651          | 5006Y          | 0                  | 97441034     | 36236166797215417 | -1511        | 81512        |     |              |
| SD0076            | 394920          | 1123673          | 4961S          | 0                  | 91440881     | 36202167479215294 | -1129        | 82041        |     |              |
| SD0077            | 394920          | 1123550          | 5002Y          | 0                  | 96440878     | 36377167279215294 | -943         | 82093        |     |              |
| SD0078            | 394955          | 1123329          | 5142Y          | 0                  | 122440937    | 36694166540215345 | -416         | 82166        |     |              |
| SD0079            | 394975          | 1123088          | 5376Y          | 0                  | 112440968    | 37038164245215375 | -537         | 81239        |     |              |
| SD0080            | 394854          | 1123068          | 5267Y          | 0                  | 100440744    | 37063164543215196 | -1086        | 81049        |     |              |
| SD0081            | 394877          | 1123191          | 5232Y          | 0                  | 103440790    | 36888165500215230 | -493         | 81765        |     |              |
| SD0082            | 394862          | 1123402          | 5084Y          | 0                  | 102440767    | 36587166838215208 | -526         | 82236        |     |              |
| SD0083            | 394812          | 1123531          | 5057Y          | 0                  | 112440678    | 36401167042215134 | -501         | 82363        |     |              |
| SD0084            | 394840          | 1123666          | 4932Y          | 0                  | 104440733    | 36209168040215175 | -713         | 82569        |     |              |
| SD0086            | 394739          | 1123397          | 5223Y          | 0                  | 101440539    | 36590166173215026 | 306          | 82593        |     |              |
| SD0087            | 394748          | 1123276          | 5170U          | 0                  | 91440553     | 36763166182215039 | -203         | 82254        |     |              |
| SD0088            | 394746          | 1123113          | 5177U          | 0                  | 89440545     | 36995165106215036 | -1210        | 81222        |     |              |
| SD0089            | 394624          | 1123059          | 5075Y          | 0                  | 83440318     | 37068165439214855 | -1657        | 81117        |     |              |
| SD0090            | 394636          | 1123161          | 5086Y          | 0                  | 84440343     | 36923166023214873 | -987         | 81750        |     |              |
| SD0091            | 394632          | 1123282          | 5175Y          | 0                  | 99440339     | 36750166258214867 | 92           | 82541        |     |              |
| SD0094            | 394513          | 1123129          | 4986Y          | 0                  | 79440115     | 36965166719214691 | -1050        | 82023        |     |              |
| SD0095            | 395236          | 1123805          | 5198Y          | 0                  | 182441469    | 36024166361215763 | -485         | 81968        |     |              |
| SD0096            | 395201          | 1123964          | 5179Y          | 0                  | 156441409    | 35796166252215710 | -721         | 81771        |     |              |
| SD0097            | 395238          | 1124178          | 5219Y          | 0                  | 209441483    | 35493165801215766 | -850         | 81559        |     |              |
| SD0098            | 395179          | 1124308          | 4986Y          | 0                  | 161441377    | 35305167103215676 | -1654        | 81501        |     |              |
| SD0099            | 395215          | 1124434          | 5027H          | 0                  | 164441447    | 35127167100215731 | -1325        | 81694        |     |              |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TEMP.<br>IN/OUT | NORTH<br>M | EAST<br>M         | ORSV<br>GRAV | THEO<br>GRAV | FAA | CRA<br>+1000 |
|-------------------|-----------------|------------------|----------------|-----------------|------------|-------------------|--------------|--------------|-----|--------------|
| SD0142            | 394802          | 1124680          | 4896V          | 0               | 149440690  | 34761167955215119 | -1090        | 82360        |     |              |
| SD0144            | 394691          | 1124726          | 5165S          | 0               | 178440094  | 34690166430214960 | 76           | 82636        |     |              |
| SD0146            | 394623          | 1124568          | 4681S          | 0               | 114440356  | 34914168679214853 | -2124        | 82024        |     |              |
| SD0147            | 394520          | 1124666          | 4876S          | 0               | 118440168  | 34771167439214701 | -1375        | 82112        |     |              |
| SD0148            | 394478          | 1124570          | 4712Y          | 0               | 82440088   | 34906168027214638 | -2270        | 81741        |     |              |
| SD0149            | 394466          | 1124777          | 5046Y          | 0               | 128440071  | 34610166347214621 | -787         | 82130        |     |              |
| SD0154            | 394388          | 1124917          | 5126Y          | 0               | 115439931  | 34407165362214505 | -904         | 81728        |     |              |
| SD0155            | 394360          | 1124789          | 4912V          | 0               | 89439876   | 34589166991214464 | -1248        | 82088        |     |              |
| SD0156            | 394424          | 1124668          | 4816H          | 0               | 85439991   | 34764167479214559 | -1758        | 81901        |     |              |
| SD0157            | 394334          | 1124614          | 4683Y          | 0               | 67439823   | 34838168055214425 | -2300        | 81794        |     |              |
| SD0158            | 394277          | 1124509          | 45981Y         | 0               | 69439714   | 34986168720214341 | -2348        | 82038        |     |              |
| SD0160            | 394247          | 1124894          | 4917Y          | 0               | 76439670   | 34435166398214296 | -1627        | 81679        |     |              |
| SD0164            | 394130          | 1124864          | 4771H          | 0               | 57439452   | 34473167159214123 | -2066        | 81716        |     |              |
| SD0165            | 394131          | 1124708          | 4686H          | 0               | 58439450   | 34696168146214124 | -1874        | 82201        |     |              |
| SD0166            | 394186          | 1124566          | 4623Y          | 0               | 66439547   | 34901168246214206 | -1856        | 82442        |     |              |
| SD0167            | 394055          | 1124789          | 4765Y          | 0               | 55439311   | 34576167412214012 | -1758        | 82045        |     |              |
| SD0168            | 394007          | 1124970          | 4794U          | 0               | 53439228   | 34317166722213941 | -2105        | 81597        |     |              |
| SD0171            | 393922          | 1124941          | 4782U          | 0               | 50439070   | 34355166895213815 | -1919        | 81821        |     |              |
| SD0172            | 393940          | 1124913          | 4898U          | 0               | 51439096   | 34696167305213841 | -444         | 82902        |     |              |
| SD0174            | 393801          | 1124671          | 4924Y          | 0               | 52438838   | 34737167255213636 | 6            | 83246        |     |              |
| SD0175            | 393838          | 1124906          | 4836V          | 0               | 48438913   | 34402166994213691 | -1187        | 82366        |     |              |
| SD0177            | 394496          | 1124404          | 4600U          | 0               | 81440116   | 35144168716214665 | -2661        | 81730        |     |              |
| SD0178            | 394481          | 1124159          | 4680U          | 0               | 63440082   | 35493169254214643 | -1348        | 82753        |     |              |
| SD0179            | 394461          | 1124002          | 4724U          | 0               | 67440041   | 35717169211214613 | -947         | 83006        |     |              |
| SD0180            | 394466          | 1123837          | 4790U          | 0               | 99440046   | 35953168944214621 | -600         | 83161        |     |              |
| SD0181            | 394338          | 1123816          | 4714U          | 0               | 65439808   | 35975169524214431 | -547         | 83440        |     |              |
| SD0182            | 394336          | 1123963          | 4675U          | 0               | 58439812   | 35768169677214431 | -762         | 83352        |     |              |
| SD0183            | 394362          | 1124117          | 4650U          | 0               | 59439861   | 35549169519214466 | -1189        | 83010        |     |              |
| SD0184            | 394415          | 1124283          | 4633U          | 0               | 61439963   | 35314168985214545 | -1963        | 82297        |     |              |
| SD0185            | 394387          | 1124485          | 4599U          | 0               | 74439917   | 35024168634214504 | -2591        | 81797        |     |              |
| SD0186            | 394317          | 1124381          | 4601U          | 0               | 60439785   | 35170168924214400 | -2178        | 82189        |     |              |
| SD0187            | 394273          | 1124230          | 4614U          | 0               | 55439699   | 35384169188214335 | -1726        | 82592        |     |              |
| SD0188            | 394243          | 1124067          | 4619U          | 0               | 56439639   | 35016169750214291 | -1073        | 83229        |     |              |
| SD0189            | 394211          | 1123914          | 4629U          | 0               | 54439576   | 35834170100214243 | -583         | 83683        |     |              |
| SD0190            | 394180          | 1123761          | 4647U          | 0               | 56439515   | 36051169654214197 | -814         | 83393        |     |              |
| SD0191            | 394092          | 1123872          | 4612U          | 0               | 56439355   | 35890169443214066 | -1224        | 83096        |     |              |
| SD0192            | 394126          | 1124025          | 4600U          | 0               | 51439422   | 35672169737214117 | -1092        | 83270        |     |              |
| SD0193            | 394156          | 1124177          | 4599U          | 0               | 52439481   | 35456169399214162 | -1483        | 82883        |     |              |
| SD0194            | 394218          | 1124368          | 4592U          | 0               | 58439601   | 35185169230214253 | -1613        | 82584        |     |              |
| SD0195            | 394143          | 1124483          | 4608Y          | 0               | 63439466   | 35016169473214142 | -1306        | 83000        |     |              |
| SD0196            | 394100          | 1124328          | 4695U          | 0               | 53439382   | 35238169459214078 | -438         | 83602        |     |              |
| SD0197            | 394462          | 1123712          | 4947Y          | 0               | 105440035  | 36131167639214615 | -423         | 82809        |     |              |
| SD0198            | 394270          | 1123687          | 4724U          | 0               | 63439679   | 36160169330214330 | -545         | 83406        |     |              |
| SD0199            | 394082          | 1123718          | 4626U          | 0               | 51439332   | 36110169344214052 | -1176        | 83096        |     |              |
| SD0201            | 394214          | 1123572          | 4704U          | 0               | 62439573   | 36323169024214248 | -960         | 83058        |     |              |
| SD0202            | 394369          | 1123589          | 4839Y          | 0               | 111439660  | 36303168462214477 | -477         | 83129        |     |              |
| DM0032            | 395314          | 1125431          | 5296S          | 46              | 239441659  | 33709168598215878 | 566          | 82782        |     |              |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TFR-COR.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM       | UNSV<br>GRAV | THEO<br>GRAV | FAA | CRA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|--------------|-------------------|--------------|--------------|-----|--------------|
| SD0100            | 395134          | 1124410          | 4849C          | 0                  | 133441297    | 35158167952215611 | -2027        | 81568        |     |              |
| SD0101            | 395112          | 1124225          | 4867Y          | 0                  | 134441251    | 35421167384215578 | -2393        | 81141        |     |              |
| SD0102            | 395124          | 1124092          | 4954Y          | 0                  | 139441270    | 35611167134215596 | -1842        | 81400        |     |              |
| SD0103            | 395108          | 1123896          | 5060Y          | 0                  | 114441235    | 35890166746215573 | -1209        | 81647        |     |              |
| SD0104            | 395010          | 1123822          | 4939Y          | 0                  | 100441052    | 35992167257215427 | -1692        | 81563        |     |              |
| SD0105            | 395024          | 1123961          | 4922Y          | 0                  | 100441081    | 35795167083215448 | -2047        | 81266        |     |              |
| SD0106            | 395011          | 1124092          | 4954Y          | 0                  | 101441061    | 35607167383215429 | -1426        | 81778        |     |              |
| SD0107            | 395021          | 1124225          | 4784Y          | 0                  | 105441083    | 35418167595215444 | -2829        | 80960        |     |              |
| SD0108            | 395026          | 1124376          | 4690S          | 0                  | 115441096    | 35203168458215451 | -2858        | 81261        |     |              |
| SD0109            | 394907          | 1124370          | 4644Y          | 0                  | 93440876     | 35207168479215274 | -2693        | 81560        |     |              |
| SD0110            | 394928          | 1124244          | 4723Y          | 0                  | 88440911     | 35386168479215305 | -2381        | 81598        |     |              |
| SD0111            | 394909          | 1124103          | 4769Y          | 0                  | 85440872     | 35588167995215277 | -2404        | 81416        |     |              |
| SD0112            | 394902          | 1123954          | 4838B          | 0                  | 84440855     | 35800167737215267 | -2002        | 81581        |     |              |
| SD0113            | 394899          | 1123802          | 4891Y          | 0                  | 87440846     | 36017167794215263 | -1442        | 81963        |     |              |
| SD0114            | 394795          | 1123807          | 4888Y          | 0                  | 87440654     | 36006168221215109 | -889         | 82527        |     |              |
| SD0115            | 394801          | 1123956          | 4810B          | 0                  | 77440669     | 35794168397215117 | -1455        | 82216        |     |              |
| SD0116            | 394798          | 1124116          | 4806V          | 0                  | 71440667     | 35566168069215113 | -1820        | 81859        |     |              |
| SD0117            | 394797          | 1124229          | 4768V          | 0                  | 71440668     | 35404167968215112 | -2274        | 81535        |     |              |
| SD0118            | 394797          | 1124342          | 4679Y          | 0                  | 77440672     | 35243168384215112 | -2696        | 81423        |     |              |
| SD0119            | 394739          | 1124487          | 4585U          | 0                  | 108440568    | 35034169360215026 | -2519        | 81951        |     |              |
| SD0120            | 394684          | 1124324          | 4762U          | 0                  | 67440462     | 35265167951214944 | -2180        | 81645        |     |              |
| SD0121            | 394695          | 1124191          | 4775H          | 0                  | 66440479     | 35455168229214960 | -1797        | 81983        |     |              |
| SD0122            | 394709          | 1124002          | 4803Y          | 0                  | 73440500     | 35725168811214981 | -971         | 82720        |     |              |
| SD0124            | 394593          | 1123820          | 4992Y          | 0                  | 103440280    | 35981167803214809 | -29          | 83048        |     |              |
| SD0125            | 394583          | 1123973          | 4844Y          | 0                  | 70440266     | 35762168640214795 | -569         | 82979        |     |              |
| SD0126            | 394610          | 1124145          | 4760U          | 0                  | 64440320     | 35518168832214834 | -1209        | 82620        |     |              |
| SD0127            | 394563          | 1124229          | 4703Y          | 0                  | 65440236     | 35396168945214765 | -1563        | 82462        |     |              |
| SD0128            | 394597          | 1124327          | 4655H          | 0                  | 74440301     | 35257168655214815 | -2356        | 81841        |     |              |
| SD0129            | 394616          | 1124444          | 4600B          | 0                  | 93440340     | 35091168901214843 | -2654        | 81750        |     |              |
| SD0130            | 395201          | 1124641          | 4724C          | 0                  | 163441464    | 34831169461215740 | -1824        | 82227        |     |              |
| SD0131            | 395226          | 1124794          | 4547C          | 0                  | 163441519    | 34615170525215780 | -2468        | 82187        |     |              |
| SD0132            | 395233          | 1124955          | 4729C          | 0                  | 111441558    | 34390169757215809 | -1550        | 82432        |     |              |
| SD0133            | 395085          | 1124943          | 4935H          | 0                  | 120441269    | 34396168108215577 | -1031        | 82258        |     |              |
| SD0134            | 395106          | 1124759          | 4657C          | 0                  | 121441285    | 34653169989215593 | -1778        | 82458        |     |              |
| SD0135            | 395149          | 1124568          | 4691C          | 0                  | 149441336    | 34936169263215639 | -2233        | 81917        |     |              |
| SD0136            | 395068          | 1124544          | 4614H          | 0                  | 129441182    | 34965169449215516 | -2653        | 81741        |     |              |
| SD0137            | 395007          | 1124702          | 4818C          | 0                  | 112441096    | 34736168537215444 | -1568        | 82112        |     |              |
| SD0139            | 394923          | 1124753          | 5206C          | 0                  | 260440935    | 34662166138215313 | -182         | 82322        |     |              |
| SD0140            | 394976          | 1124532          | 4587C          | 0                  | 116441013    | 34980169609215381 | -2608        | 81663        |     |              |
| SD0141            | 394864          | 1124521          | 4593S          | 0                  | 114440800    | 34990169631215211 | -2358        | 82091        |     |              |
| SD0003            | 40 211          | 1124787          | 4810S          | 0                  | 201443300    | 34661171352217209 | -593         | 83202        |     |              |
| SD0005            | 40 123          | 1124902          | 4640C          | 0                  | 162443140    | 34494171804217079 | -1616        | 82726        |     |              |
| SD0009            | 40 56           | 1124992          | 4554S          | 0                  | 134443019    | 34363171891216979 | -2233        | 82368        |     |              |
| SD0010            | 40 36           | 1124791          | 5076S          | 0                  | 281442976    | 34649169254216949 | 73           | 83041        |     |              |
| SD0334            | 394616          | 1124823          | 5098S          | 32                 | 460440350    | 34550160196214843 | 1602         | 81837        |     |              |
| SD0029            | 395510          | 1124516          | 6507S          | 46                 | 732441995    | 35021158117216169 | 3190         | 81774        |     |              |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELFV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>UTM      | EAST<br>UTM       | ORSV<br>GRAV | THEO<br>GRAV | FAA | ORA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|-------------------|-------------------|--------------|--------------|-----|--------------|
| SD0041            | 395434          | 1124030          | 7054S          | 17                 | 966441841         | 35710154436216056 | 4766         | 81690        |     |              |
| SD0052            | 395224          | 1122830          | 6230Y          | 39                 | 220441423         | 37414159328215745 | 2217         | 81227        |     |              |
| SD0055            | 394926          | 1122828          | 5710Y          | 5                  | 140440872         | 37407162013215302 | 447          | 81117        |     |              |
| SD0060            | 394706          | 1122502          | 5577Y          | 12                 | 111440457         | 37866162343214977 | -148         | 80953        |     |              |
| SD0073            | 395038          | 1123237          | 5607Y          | 5                  | 155441089         | 36828163751215469 | 1050         | 82086        |     |              |
| SD0085            | 394788          | 1123353          | 5442Y          | 12                 | 126440629         | 36654164590215098 | 706          | 82283        |     |              |
| SD0209            | 394433          | 1123434          | 5407Y          | 7                  | 157439974         | 36527165180214572 | 1493         | 83215        |     |              |
| SD0047            | 395629          | 1123294          | 6654S          | 38                 | 413442183         | 36765156936216345 | 3216         | 80972        |     |              |
| SD0051            | 395445          | 1122992          | 6507S          | 5                  | 370441836         | 37190157350216073 | 2519         | 80700        |     |              |
| SD0123            | 394668          | 1123859          | 5538S          | 163                | 415440420         | 35928163882214920 | 1681         | 82770        |     |              |
| SD0218            | 393694          | 1124815          | 5278V          | 41                 | 168438644         | 34527164141213477 | 334          | 82541        |     |              |
| SD0302            | 393398          | 1122641          | 4930V          | 33                 | 70438041          | 37629168037213039 | 1393         | 84681        |     |              |
| SD0004            | 40 121          | 1124703          | 5450S          | 20                 | 773443131         | 34777167092217076 | 1305         | 83510        |     |              |
| SD0007            | 40 125          | 1125243          | 4506C          | 0                  | 73443154          | 34009173366217081 | -1314        | 83391        |     |              |
| SD0014            | 395875          | 1125101          | 4565S          | 0                  | 104442687         | 34201172115216710 | -1638        | 82896        |     |              |
| SD0042            | 394689          | 1123562          | 6480V          | 922520440451       | 36353157007214952 | 3043              | 83554        |              |     |              |
| SD0093            | 394558          | 1123379          | 5914S          | 941014440204       | 36610161402214757 | 2304              | 83241        |              |     |              |
| SD0159            | 394250          | 1124730          | 4743R          | 0                  | 64439671          | 34669167812214301 | -1855        | 82032        |     |              |
| SD0173            | 394002          | 1124561          | 5171U          | 44                 | 384439207         | 34902165654213934 | 386          | 83178        |     |              |
| SD0200            | 394125          | 1123504          | 4682U          | 0                  | 55439406          | 36417168885214116 | -1170        | 82916        |     |              |
| SD0203            | 394374          | 1123484          | 4953Y          | 0                  | 122439866         | 36454167960214484 | 87           | 83315        |     |              |
| SD0216            | 394098          | 1122875          | 4837S          | 0                  | 60439341          | 37315168490214076 | -67          | 83495        |     |              |
| SD0218            | 393694          | 1124815          | 5278V          | 82                 | 464438644         | 34527164141213477 | 334          | 82788        |     |              |
| SD0279            | 393750          | 1122991          | 4753C          | 0                  | 48438700          | 37139168814213560 | -18          | 83819        |     |              |
| SD0309            | 393754          | 1122346          | 5702V          | 941245438693       | 38061162566213566 | 2663              | 84554        |              |     |              |
| 1097              | 395473          | 112467152192T    |                | 0                  | 226441931         | 34799166694216114 | -320         | 82106        |     |              |
| U181              | 395102          | 112467746299T    |                | 0                  | 123441245         | 34776170311215564 | -1700        | 82633        |     |              |
| U182              | 394902          | 112458346578T    |                | 0                  | 110440872         | 34903169836215267 | -1600        | 82620        |     |              |
| 3193              | 394158          | 112451446257T    |                | 0                  | 62439494          | 34975169497214165 | -1140        | 83142        |     |              |
| U263              | 394063          | 112472247119T    |                | 0                  | 61439324          | 34674167948214024 | -1740        | 82251        |     |              |
| U260              | 393438          | 112454945830T    |                | 0                  | 52438163          | 34898168427213099 | -1560        | 82862        |     |              |
| U259              | 393242          | 112464645738T    |                | 0                  | 43437804          | 34750168363212808 | -1410        | 83033        |     |              |
| U258              | 393062          | 112451345597T    |                | 0                  | 37437467          | 34936167551212542 | -2080        | 82397        |     |              |
| U279              | 392512          | 112458545709T    |                | 0                  | 35436451          | 34613166586211729 | -2130        | 82315        |     |              |
| U316              | 392250          | 112470245928T    |                | 0                  | 34435970          | 34636166104211341 | -2020        | 82344        |     |              |
| U193              | 394869          | 112528156299T    |                | 0                  | 158440832         | 33906164506215219 | 2246         | 83218        |     |              |
| U192              | 394902          | 112524056299T    |                | 0                  | 170440892         | 33966164926215267 | 2610         | 83600        |     |              |
| U188              | 394912          | 112491154869T    |                | 0                  | 242440900         | 34435164696215282 | 1020         | 82572        |     |              |
| U191              | 395012          | 112520853478T    |                | 0                  | 131441094         | 34016166412215431 | 1280         | 83191        |     |              |
| U187              | 395019          | 112483649757T    |                | 0                  | 132441096         | 34544168096215441 | -520         | 82639        |     |              |
| U206              | 395024          | 112547948560T    |                | 0                  | 84441140          | 32916168744215448 | -1010        | 82514        |     |              |
| U189              | 395080          | 112504051837T    |                | 0                  | 129441215         | 34258166959215531 | 180          | 82649        |     |              |



## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM | OBSV<br>GRAV | THEO<br>GRAV | FAA   | CRA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|--------------|-------------|--------------|--------------|-------|--------------|
| U190              | 395214          | 11252644         | 949RT          | 0                  | 86441469     | 3394416843  | 1215730      | -730         | 82466 |              |
| 1607              | 395256          | 11254014         | 8809T          | 0                  | 88441551     | 3375016906  | 3215792      | -810         | 82628 |              |
| 1096              | 395722          | 1125473          | 0              | 0                  | 221442416    | 3366617262  | 9216484      | -1210        | 83330 |              |
| 1608              | 395875          | 1125101          | 0              | 0                  | 222442687    | 3420117212  | 6216711      | -1630        | 82800 |              |
| SD0150            | 394452          | 1125135          | 5367V          | 0                  | 118440056    | 3409816426  | 5214600      | 173          | 81986 |              |
| SD0151            | 394361          | 1125227          | 5201V          | 0                  | 90439890     | 3396316477  | 0214465      | -749         | 81602 |              |
| SD0152            | 394306          | 1125144          | 5103V          | 0                  | 84439786     | 3408616509  | 0214384      | -1270        | 81409 |              |
| SD0153            | 394343          | 1125029          | 5144V          | 0                  | 99439851     | 3424616544  | 1214438      | -589         | 81965 |              |
| SD0161            | 394187          | 1125033          | 4924V          | 0                  | 66439563     | 3423416596  | 6214207      | -1903        | 81366 |              |
| SD0162            | 394137          | 1125188          | 4940R          | 0                  | 63439475     | 3401016568  | 8214134      | -1957        | 81257 |              |
| SD0163            | 394098          | 1125014          | 4859V          | 0                  | 59439398     | 3425616631  | 7214076      | -2032        | 81454 |              |
| SD0169            | 394022          | 1125139          | 4847R          | 0                  | 56439261     | 3407516628  | 6213963      | -2064        | 81461 |              |
| SD0170            | 393899          | 1125127          | 4801R          | 0                  | 52439033     | 3408916645  | 9213780      | -2142        | 81535 |              |
| SD0176            | 393796          | 1125018          | 4829U          | 0                  | 49438839     | 3424116675  | 3213626      | -1431        | 82146 |              |
| SD0219            | 393571          | 1125118          | 4707U          | 0                  | 48438426     | 3408916732  | 4213295      | -1676        | 82318 |              |
| SD0221            | 393489          | 1125131          | 4670V          | 0                  | 48438274     | 3406716759  | 1213173      | -1636        | 82484 |              |
| SD0223            | 393402          | 1125018          | 4643U          | 0                  | 54438110     | 3422616791  | 4213045      | -1439        | 82779 |              |
| SD0012            | 395933          | 1125003          | 4620S          | 0                  | 143442792    | 3434311714  | 64216797     | -1857        | 82528 |              |
| SD0013            | 395970          | 1125117          | 4533S          | 0                  | 98442864     | 3418217227  | 5216852      | -1919        | 82718 |              |
| SD0021            | 395775          | 1125129          | 4559S          | 0                  | 106442503    | 3415817251  | 3216562      | -1147        | 83400 |              |
| SD0022            | 395688          | 1125016          | 4818S          | 0                  | 116442339    | 3431517022  | 5216433      | -870         | 82814 |              |
| SD0025            | 395576          | 1125160          | 4498S          | 0                  | 123442136    | 3410617190  | 4216266      | -2036        | 82746 |              |
| SD0026            | 395513          | 1125017          | 4489S          | 0                  | 163442015    | 3430717146  | 1216173      | -2472        | 82381 |              |
| SD0001            | 40 213          | 1125243          | 4511S          | 0                  | 77443317     | 3401217389  | 8217213      | -864         | 83827 |              |
| SD0002            | 40 213          | 1125013          | 4524S          | 0                  | 102443310    | 3433917286  | 0217213      | -1781        | 82891 |              |
| SD0006            | 40 124          | 1125129          | 4508S          | 0                  | 88443149     | 3417117294  | 7217080      | -1713        | 83000 |              |
| SD0008            | 40 40           | 1125243          | 4505C          | 0                  | 76442997     | 3400617296  | 7216955      | -1596        | 83115 |              |
| SD0138            | 394952          | 1125050          | 6260C          | 37                 | 878441025    | 3424015898  | 4215376      | 2522         | 82086 |              |
| SD0037            | 395292          | 11251385         | 4901T          | 1                  | 313441610    | 3412616479  | 2215845      | 613          | 82202 |              |
| SD0143            | 394747          | 1125044          | 7305V          | 181                | 345440599    | 3423915151  | 4215038      | 5232         | 81681 |              |
| WW0026            | 392250          | 1125036          | 4575U          | 0                  | 37435980     | 3415616625  | 6211341      | -2031        | 82401 |              |
| WW0001            | 393315          | 1125131          | 4620U          | 0                  | 51437953     | 3406016808  | 3212916      | -1357        | 82937 |              |
| WW0002            | 393260          | 11248294         | 5919T          | 0                  | 51437842     | 3449116832  | 1212834      | -1302        | 83087 |              |
| WW0003            | 393242          | 1125032          | 4603U          | 0                  | 50437815     | 3419916830  | 3212806      | -1189        | 83161 |              |
| WW0004            | 393195          | 1124906          | 4588V          | 0                  | 44437724     | 3437816812  | 0212738      | -1444        | 82952 |              |
| WW0005            | 393182          | 1125137          | 4596U          | 0                  | 47437707     | 3404716827  | 0212720      | -1198        | 83173 |              |
| WW0006            | 393141          | 1124793          | 4577U          | 0                  | 40437621     | 3453816794  | 3212654      | -1644        | 82783 |              |
| WW0007            | 393140          | 1125018          | 4592U          | 0                  | 44437626     | 3421616832  | 5212657      | -1121        | 83262 |              |
| WW0008            | 393053          | 1124906          | 4581U          | 0                  | 40437461     | 3437316793  | 6212528      | -1483        | 82932 |              |
| WW0009            | 393053          | 1125131          | 4592V          | 0                  | 45437468     | 3405016816  | 5212528      | -1150        | 83233 |              |
| WW0010            | 392967          | 1124793          | 4564U          | 0                  | 38437299     | 3453216761  | 0212401      | -1844        | 82628 |              |
| WW0011            | 392966          | 1125016          | 4585U          | 0                  | 41437304     | 3420916804  | 6212400      | -1207        | 83196 |              |
| WW0012            | 392879          | 1124906          | 4571U          | 0                  | 39437139     | 3436516762  | 5212271      | -1631        | 82818 |              |
| WW0013            | 392897          | 1125104          | 4626U          | 0                  | 43437179     | 3408316775  | 7212298      | -1008        | 83257 |              |
| WW0014            | 392792          | 1124810          | 4563V          | 0                  | 38436976     | 3450116750  | 7212142      | -1696        | 82779 |              |
| WW0015            | 392792          | 1125018          | 4568U          | 0                  | 42436982     | 3420316754  | 9212142      | -1437        | 82443 |              |
| WW0016            | 392685          | 1124922          | 4593U          | 0                  | 40436781     | 3433616735  | 9211984      | -1403        | 82472 |              |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TER-CL.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM       | GRSV<br>GRAV | THEC<br>GRAV | FAA | CRA<br>+1000 |
|-------------------|-----------------|------------------|----------------|-------------------|--------------|-------------------|--------------|--------------|-----|--------------|
| WW0017            | 392672          | 1125051          | 46460          | 0                 | 69436761     | 34151166611211965 | -1430        | 82792        |     |              |
| WW0018            | 392599          | 1124810          | 45730          | 0                 | 37436619     | 34494167265211857 | -1558        | 82882        |     |              |
| WW0019            | 392598          | 1125035          | 47650          | 0                 | 56436623     | 34171165924211855 | -1090        | 82714        |     |              |
| WW0020            | 392511          | 1124923          | 45840          | 0                 | 41436459     | 34328167012211727 | -1577        | 82829        |     |              |
| WW0021            | 392510          | 1125148          | 47530          | 0                 | 49436464     | 34005165662211725 | -1335        | 82503        |     |              |
| WW0022            | 392425          | 1124811          | 45640          | 0                 | 36436297     | 34486166734211599 | -1917        | 82553        |     |              |
| WW0023            | 392424          | 1125036          | 46080          | 0                 | 42436302     | 34163166446211596 | -1788        | 82537        |     |              |
| WW0024            | 392337          | 1124923          | 45780          | 0                 | 36436137     | 34322166516211470 | -1872        | 82549        |     |              |
| WW0025            | 392251          | 1124811          | 45670          | 0                 | 35435975     | 34479166186211342 | -2180        | 82279        |     |              |
| WW0027            | 392162          | 1124925          | 45610          | 0                 | 35435814     | 34312166411211211 | -1879        | 82600        |     |              |
| WW0028            | 392161          | 1125150          | 45630          | 0                 | 39435818     | 33989166041211209 | -2228        | 82248        |     |              |
| WW0029            | 392074          | 1124812          | 45700          | 0                 | 34435648     | 34471166072211680 | -2004        | 82444        |     |              |
| WW0030            | 392074          | 1125038          | 45580          | 0                 | 36435654     | 34147166176211080 | -2011        | 82479        |     |              |
| WW0031            | 391986          | 1124925          | 45610          | 0                 | 33435488     | 34306166371210951 | -1659        | 82818        |     |              |
| WW0032            | 391988          | 1125156          | 45520          | 0                 | 36435499     | 33974166162210954 | -1954        | 82556        |     |              |
| WW0033            | 391898          | 1124812          | 45640          | 0                 | 33435322     | 34465166227210820 | -1644        | 82822        |     |              |
| WW0034            | 391900          | 1125018          | 45551          | 0                 | 34435332     | 34169166338210823 | -1619        | 82819        |     |              |
| WW0035            | 391810          | 1124926          | 45550          | 0                 | 33435153     | 34298166270210691 | -1555        | 82942        |     |              |
| WW0036            | 391811          | 1125151          | 45510          | 0                 | 35435171     | 33974166379210692 | -1488        | 83026        |     |              |
| WW0037            | 391722          | 1124813          | 45550          | 0                 | 33434997     | 34457165985210560 | -1710        | 82787        |     |              |
| WW0038            | 391723          | 1125038          | 45570          | 0                 | 33435005     | 34134166211210562 | -1466        | 83024        |     |              |
| WW0039            | 391636          | 1124925          | 45540          | 0                 | 33434841     | 34293165939210434 | -1640        | 82861        |     |              |
| WW0040            | 391636          | 1125145          | 45590          | 0                 | 34434847     | 33976166205210434 | -1327        | 83157        |     |              |
| WW0041            | 391564          | 1124847          | 45660          | 0                 | 33434705     | 34402165817210327 | -1542        | 82918        |     |              |
| WW0042            | 391549          | 1125040          | 45520          | 0                 | 33434683     | 34124166152210305 | -1317        | 83190        |     |              |
| WW0043            | 391811          | 1125825          | 46650          | 0                 | 43435192     | 33006164823210692 | -1969        | 82163        |     |              |
| WW0044            | 391812          | 1125600          | 45880          | 0                 | 39435186     | 33329165027210694 | -2492        | 81899        |     |              |
| WW0045            | 391812          | 1125390          | 45610          | 0                 | 36435180     | 33631165940210694 | -1832        | 82648        |     |              |
| WW0046            | 391719          | 1125712          | 46400          | 0                 | 39435018     | 33165164735210556 | -2156        | 82057        |     |              |
| WW0047            | 391725          | 1125488          | 45630          | 0                 | 37435022     | 33487165557210565 | -2068        | 82406        |     |              |
| WW0048            | 391724          | 1125263          | 45500          | 0                 | 35435013     | 33810166242210563 | -1504        | 83013        |     |              |
| WW0049            | 391629          | 1125824          | 46510          | 0                 | 40434855     | 33000164603210423 | -2052        | 82125        |     |              |
| WW0050            | 391632          | 1125600          | 45780          | 0                 | 38434853     | 33322164966210427 | -2380        | 82044        |     |              |
| WW0051            | 391655          | 1125343          | 45561          | 0                 | 35434888     | 33693166008210462 | -1580        | 82916        |     |              |
| WW0052            | 391545          | 1125712          | 46000          | 0                 | 38434696     | 33158164656210294 | -2355        | 81494        |     |              |
| WW0053            | 391550          | 1125489          | 45660          | 0                 | 36434648     | 33478165707210306 | -1631        | 82831        |     |              |
| WW0054            | 391550          | 1125264          | 45510          | 0                 | 34434692     | 3802166168210306  | -1312        | 83201        |     |              |
| U318              | 391519          | 1125353          | 45548          | 0                 | 34434637     | 33673165964210261 | -1440        | 83054        |     |              |
| U317              | 391698          | 1125045          | 45518          | 0                 | 33434959     | 34123166183210525 | -1510        | 82993        |     |              |
| 2374              | 391905          | 1124813          | 45545          | 0                 | 33435335     | 34464166324210831 | -1650        | 82843        |     |              |
| 2373              | 391907          | 1125497          | 46102          | 0                 | 39435359     | 33481165045210834 | -2410        | 81899        |     |              |
| U278              | 392603          | 1124796          | 45719          | 0                 | 37436026     | 34523167272211863 | -1570        | 82877        |     |              |
| 2477              | 392700          | 1125172          | 46844          | 0                 | 52436816     | 33978166498212007 | -1430        | 82842        |     |              |
| U280              | 392752          | 1125428          | 47789          | 0                 | 54436920     | 33613165777212083 | -1340        | 82614        |     |              |
| U281              | 392828          | 1125795          | 51368          | 0                 | 84437072     | 33090164463212196 | 510          | 83094        |     |              |
| 2478              | 392846          | 1125810          | 50955          | 0                 | 99437106     | 33069164535212223 | 240          | 82979        |     |              |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION IDENT. | LAT. DFG | LONG. MIN | ELEV. +CODE | TEMP-COR. IN/OUT | NORTH UTM | EAST UTM | OHSV GRAV | THEO GRAV | FAA   | CRA +1000 |
|----------------|----------|-----------|-------------|------------------|-----------|----------|-----------|-----------|-------|-----------|
| U276           | 392847   | 112522    | 145899T     | 0                | 46437089  | 33914167 | 193212224 | -1850     | 82548 |           |
| U282           | 392911   | 112596    | 153130T     | 0                | 105437231 | 32855163 | 533212319 | 1180      | 83175 |           |
| U275           | 393077   | 112537    | 246647T     | 0                | 60437519  | 33706166 | 954212564 | -1720     | 82430 |           |
| U274           | 393308   | 112552    | 847057T     | 0                | 100437952 | 33492167 | 138212906 | -1490     | 82550 |           |
| U268           | 393312   | 112492    | 046388T     | 0                | 47437941  | 34363168 | 308212912 | -960      | 83267 |           |
| U273           | 393452   | 112562    | 148248T     | 0                | 109438221 | 33364166 | 592213119 | -1130     | 82519 |           |
| U272           | 393589   | 112595    | 052349T     | 0                | 113438484 | 32899164 | 162213322 | 70        | 82353 |           |
| U267           | 393603   | 112513    | 347178T     | 0                | 48438485  | 34069167 | 330213343 | -1620     | 82328 |           |
| U270           | 393700   | 112581    | 1150079T    | 0                | 81438685  | 33102165 | 529213486 | -840      | 82161 |           |
| U269           | 393754   | 112573    | 649318T     | 0                | 69438783  | 33212165 | 972213566 | -1190     | 82059 |           |
| U271           | 393842   | 112593    | 950220T     | 0                | 76438952  | 32925164 | 689213697 | -1760     | 81186 |           |
| U265           | 393866   | 112553    | 048540T     | 0                | 65438984  | 33511166 | 352213732 | -1710     | 81795 |           |
| U266           | 393934   | 112521    | 748150T     | 0                | 53439100  | 33961166 | 223213833 | -2310     | 81323 |           |
| U264           | 394012   | 112498    | 747910T     | 0                | 55439238  | 34293166 | 647213949 | -2220     | 81485 |           |
| U207           | 394121   | 112594    | 349380T     | 0                | 71439468  | 32931165 | 450214110 | -2200     | 81031 |           |
| U199           | 394181   | 112547    | 350089T     | 0                | 125439565 | 33605165 | 465214199 | -1610     | 81435 |           |
| U200           | 394193   | 112565    | 650748T     | 0                | 90439593  | 33344165 | 866214217 | -600      | 82180 |           |
| U196           | 394249   | 112527    | 150597T     | 0                | 82439684  | 33896165 | 146214300 | -1550     | 81282 |           |
| U198           | 394351   | 112505    | 050919T     | 0                | 95439867  | 34216165 | 464214451 | -1080     | 81645 |           |
| U197           | 394422   | 112485    | 150659T     | 0                | 139439992 | 34503165 | 453214556 | -940      | 81919 |           |
| U201           | 394427   | 112568    | 554508T     | 0                | 119440026 | 33312164 | 162214563 | 860       | 82409 |           |
| U203           | 394506   | 112587    | 451870T     | 0                | 84440178  | 33045164 | 668214680 | -1010     | 81384 |           |
| U194           | 394617   | 112526    | 856358T     | 0                | 146440365 | 33915163 | 112214845 | 1270      | 82216 |           |
| U204           | 394699   | 112576    | 154318T     | 0                | 114440532 | 33214164 | 292214967 | 410       | 82024 |           |
| U185           | 394722   | 112466    | 149600T     | 0                | 138440542 | 34785167 | 420215001 | -410      | 82808 |           |
| U285           | 394862   | 112573    | 952549T     | 0                | 126440833 | 33252165 | 971215208 | 190       | 82406 |           |
| DW0218         | 393582   | 112595    | 95246Y      | 0                | 116438472 | 32886164 | 189213312 | 247       | 82471 |           |
| DW0219         | 393576   | 112570    | 94927Y      | 0                | 91438453  | 33243165 | 862213302 | -1074     | 82212 |           |
| DW0220         | 393473   | 112583    | 75386Y      | 0                | 227438266 | 33056163 | 470213150 | 1008      | 82865 |           |
| DW0221         | 393378   | 112577    | 05410Y      | 0                | 276438089 | 33148163 | 272213009 | 1176      | 83006 |           |
| DW0223         | 393261   | 112576    | 653308      | 0                | 349437872 | 33149163 | 925212836 | 1249      | 83419 |           |
| DW0225         | 393077   | 112572    | 15345Y      | 0                | 266437530 | 33206163 | 472212564 | 1209      | 83245 |           |
| DW0226         | 393094   | 112556    | 54805H      | 0                | 101437557 | 33430166 | 221212589 | -1149     | 82563 |           |
| DW0227         | 393200   | 112564    | 748808      | 0                | 168437755 | 33317166 | 220212746 | -603      | 82921 |           |
| DW0228         | 393268   | 112550    | 34682Y      | 0                | 90437877  | 33526167 | 304212847 | -1483     | 82639 |           |
| DW0229         | 393323   | 112563    | 64830H      | 0                | 149437983 | 33338166 | 470212926 | -1005     | 82670 |           |
| DW0230         | 393443   | 112562    | 04790Y      | 0                | 113438204 | 33365166 | 600213105 | -1429     | 82347 |           |
| DW0231         | 393549   | 112554    | 04795H      | 0                | 71438398  | 33484166 | 573213263 | -1567     | 82150 |           |
| DW0232         | 393623   | 112544    | 547779T     | 0                | 60438532  | 33623166 | 429213372 | -1979     | 81784 |           |
| DW0233         | 393671   | 112555    | 248159T     | 0                | 65438624  | 33472166 | 285213443 | -1837     | 81802 |           |
| DW0234         | 393713   | 112565    | 048750T     | 0                | 67438704  | 33333166 | 067213505 | -1562     | 81678 |           |
| DW0235         | 393738   | 112549    | 548120      | 0                | 57438746  | 33556166 | 277213542 | -1982     | 81663 |           |
| DW0236         | 393692   | 112534    | 747670      | 0                | 57438656  | 33766166 | 449213474 | -2120     | 81678 |           |
| DW0237         | 393545   | 112525    | 347090T     | 0                | 51438382  | 33895167 | 243213256 | -1706     | 82290 |           |
| DW0238         | 393515   | 112538    | 54741Y      | 0                | 59438330  | 33705167 | 091213213 | -1506     | 82382 |           |
| DW0239         | 393421   | 112528    | 146628      | 0                | 52438153  | 33650167 | 648213073 | -1503     | 82648 |           |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM       | OBSV<br>GRAV | THEO<br>GRAV | FAA | CHA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|--------------|-------------------|--------------|--------------|-----|--------------|
| DW0240            | 393411          | 1125467          | 4715H          | U                  | 67438140     | 33583167378213058 | -1311        | 82675        |     |              |
| DW0241            | 393316          | 1125355          | 4636U          | U                  | 60437961     | 33740168259212918 | -1032        | 83216        |     |              |
| DW0242            | 393210          | 1125293          | 4615H          | U                  | 55437763     | 33824168160212761 | -1170        | 83144        |     |              |
| DW0243            | 393173          | 1125444          | 4677Y          | U                  | 69437699     | 33607167226212706 | -1467        | 82650        |     |              |
| DW0244            | 393088          | 1125386          | 4685H          | U                  | 64437540     | 33686167013212580 | -1479        | 82605        |     |              |
| DW0245            | 393081          | 1125282          | 4627U          | U                  | 52437524     | 33835167809212570 | -1218        | 83052        |     |              |
| DW0246            | 393014          | 1125445          | 4758H          | U                  | 74437405     | 33599166321212470 | -1375        | 82471        |     |              |
| DW0247            | 393002          | 1125331          | 4672Y          | U                  | 58437380     | 33762166957212453 | -1530        | 82593        |     |              |
| DW0248            | 393660          | 1125192          | 4746U          | U                  | 52438593     | 33986167024213427 | -1741        | 82124        |     |              |
| DW0249            | 392948          | 1125195          | 4621U          | U                  | 46437276     | 33955167639212373 | -1249        | 83036        |     |              |
| DW0250            | 392878          | 1125243          | 4657U          | U                  | 50437147     | 33883167119212270 | -1327        | 82840        |     |              |
| DW0251            | 392792          | 1125148          | 4630U          | U                  | 44436986     | 34016167152212142 | -1420        | 82832        |     |              |
| DW0252            | 392703          | 1125224          | 4674U          | U                  | 49436823     | 33904166556212011 | -1470        | 82638        |     |              |
| DW0253            | 392604          | 1125139          | 5102U          | U                  | 136436638    | 34022163525211864 | -325         | 82409        |     |              |
| DW0254            | 392337          | 1125148          | 4596V          | U                  | 42436144     | 33999166152211470 | -2064        | 82303        |     |              |
| DW0255            | 392598          | 1125259          | 4766Y          | U                  | 53436630     | 33850165529211855 | -1476        | 82322        |     |              |
| DW0256            | 392423          | 1125259          | 4736Y          | U                  | 45436306     | 33843165481211597 | -1547        | 82345        |     |              |
| DW0257            | 392336          | 1125372          | 4633C          | U                  | 64436149     | 33677165743211466 | -2126        | 82136        |     |              |
| DW0258            | 392423          | 1125483          | 4744H          | U                  | 54436313     | 33521165249211597 | -1703        | 82170        |     |              |
| DW0259            | 392510          | 1125371          | 4741Y          | U                  | 66436471     | 33685165543211725 | -1567        | 82329        |     |              |
| DW0260            | 392597          | 1125483          | 4800Y          | U                  | 57436635     | 33528165329211854 | -1354        | 82332        |     |              |
| DW0261            | 392684          | 1125372          | 4740Y          | U                  | 52436792     | 33691165866211983 | -1511        | 82374        |     |              |
| DW0262            | 392762          | 1125507          | 4825Y          | U                  | 60436941     | 33500165477212098 | -1213        | 82391        |     |              |
| DW0263            | 392792          | 1125354          | 4707Y          | U                  | 52436992     | 33721166366212142 | -1481        | 82517        |     |              |
| DW0264            | 392879          | 1125355          | 4699Y          | U                  | 53437153     | 33723166522212271 | -1529        | 82407        |     |              |
| DW0265            | 392900          | 1125491          | 4805Y          | U                  | 62437196     | 33529165896212302 | -1190        | 82484        |     |              |
| DW0267            | 392893          | 1125683          | 5008Y          | U                  | 85437189     | 33253165077212291 | -886         | 82918        |     |              |
| DW0268            | 392878          | 1125578          | 4895Y          | U                  | 73437156     | 33403165386212270 | -824         | 82553        |     |              |
| DW0269            | 392785          | 1125613          | 4931Y          | U                  | 67436987     | 33349164036212132 | -1698        | 81550        |     |              |
| DW0270            | 392719          | 1125699          | 5005Y          | U                  | 68436867     | 33223164773212034 | -160         | 82837        |     |              |
| DW0271            | 392646          | 1125571          | 4890Y          | U                  | 60436728     | 33404165052211927 | -657         | 82525        |     |              |
| DW0272            | 392597          | 1125707          | 5002C          | U                  | 67436642     | 33207164543211854 | -239         | 82768        |     |              |
| DW0273            | 392510          | 1125595          | 4868Y          | U                  | 60436477     | 33364165008211725 | -906         | 82550        |     |              |
| DW0274            | 392449          | 1125716          | 4954Y          | U                  | 67436368     | 33188164643211635 | -372         | 82798        |     |              |
| DW0275            | 392379          | 1125754          | 5021Y          | U                  | 75436240     | 33131164036211531 | -244         | 82706        |     |              |
| DW0276            | 392336          | 1125595          | 4780H          | U                  | 58436156     | 33357165039211468 | -1445        | 82309        |     |              |
| DW0277            | 392261          | 1125726          | 4881U          | U                  | 69436021     | 33166164734211357 | -690         | 82732        |     |              |
| DW0278            | 392296          | 1125883          | 57359T         | U                  | 436436091    | 32942158753211409 | 1327         | 82199        |     |              |
| DW0279            | 392423          | 1125932          | 54859T         | U                  | 127436327    | 32877160930211597 | 962          | 82378        |     |              |
| DW0280            | 392510          | 1125819          | 5160C          | U                  | 81436484     | 33043163290211725 | 125          | 82606        |     |              |
| DW0281            | 392595          | 1125878          | 5145Y          | U                  | 85436643     | 32961163587211851 | 149          | 82886        |     |              |
| DW0283            | 392684          | 1125819          | 5092Y          | U                  | 75436806     | 33050164121211983 | 58           | 82766        |     |              |
| DW0284            | 392762          | 1125903          | 5170Y          | U                  | 80436953     | 32932163836212098 | 392          | 82818        |     |              |
| DW0285            | 392835          | 1125803          | 5141C          | U                  | 85437085     | 33079164401212205 | 576          | 83127        |     |              |
| DW0286            | 392897          | 1125940          | 5292Y          | U                  | 100437204    | 32885163632212296 | 1137         | 83186        |     |              |
| DW0287            | 392956          | 1125745          | 5087Y          | U                  | 118437307    | 33167165035212385 | 523          | 83290        |     |              |
| DW0288            | 392998          | 1125851          | 5497Y          | U                  | 182437386    | 33017162544212447 | 1829         | 83263        |     |              |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM | OBSV<br>GRAV | THEO<br>GRAV | FAA   | CHA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|--------------|-------------|--------------|--------------|-------|--------------|
| -----             | -----           | -----            | -----          | -----              | -----        | -----       | -----        | -----        | ----- | -----        |
| DW0295            | 392160          | 11258244         | 46760T         | 0                  | 66435837     | 3302116430  | 3211208      | -1019        | 82417 |              |
| DW0296            | 392072          | 1125712          | 4688S          | 0                  | 53435671     | 3317916503  | 3211077      | -1929        | 82135 |              |
| DW0297            | 391985          | 1125824          | 4714U          | 0                  | 50435513     | 3301416459  | 3210949      | -1905        | 81977 |              |
| DW0298            | 391900          | 1125712          | 4622S          | 0                  | 43435353     | 3317216502  | 6210823      | -2302        | 81976 |              |
| DW0299            | 391899          | 1125488          | 4566V          | 0                  | 39435344     | 3349416540  | 9210822      | -2441        | 82025 |              |
| DW0300            | 391985          | 1125600          | 4584U          | 0                  | 43435506     | 3333616530  | 0210949      | -2512        | 81696 |              |
| DW0301            | 392073          | 1125487          | 4574U          | 0                  | 44435666     | 3350216574  | 2211079      | -2293        | 82150 |              |
| DW0302            | 392160          | 1125600          | 46791T         | 0                  | 53435830     | 3334316551  | 9211208      | -1657        | 82438 |              |
| DW0304            | 392249          | 1125259          | 4567S          | 0                  | 51435984     | 3383616607  | 6211339      | -2285        | 82188 |              |
| DW0304            | 392249          | 1125259          | 4567S          | 0                  | 51435984     | 3383616607  | 6211339      | -2285        | 82189 |              |
| DW0305            | 392161          | 1125372          | 4562S          | 0                  | 48435825     | 3367016583  | 6211209      | -2443        | 82045 |              |
| DW0306            | 392074          | 1125262          | 4558S          | 0                  | 39435661     | 3382516593  | 1211080      | -2257        | 82236 |              |
| DW0307            | 391986          | 1125374          | 4555U          | 0                  | 39435501     | 3366116595  | 8210951      | -2128        | 82376 |              |
| DW0308            | 391898          | 1125260          | 45508T         | 0                  | 36435335     | 3382116605  | 7210820      | -1937        | 82577 |              |
| DW0309            | 395868          | 1125395          | 4508H          | 0                  | 68442683     | 3378317272  | 5216700      | -1552        | 83139 |              |
| DW0027            | 395949          | 1125242          | 4511S          | 0                  | 78442829     | 3400417308  | 7216820      | -1282        | 83409 |              |
| DW0028            | 395863          | 1125241          | 4536S          | 0                  | 80442669     | 3400217300  | 5216693      | -1002        | 83607 |              |
| DW0030            | 395762          | 1125346          | 4410U          | 0                  | 102442486    | 3384517336  | 4216543      | -1680        | 83381 |              |
| DW0031            | 395526          | 1125277          | 5103S          | 0                  | 174442047    | 3393716823  | 3216193      | 63           | 82832 |              |
| DW0034            | 395600          | 1125465          | 4548S          | 0                  | 86442190     | 3367217214  | 6216302      | -1378        | 83203 |              |
| DW0035            | 395799          | 1125529          | 4475U          | 0                  | 65442560     | 3358917326  | 2216598      | -1224        | 83577 |              |
| DW0036            | 395888          | 1125540          | 4413U          | 0                  | 63442725     | 3357717379  | 1216730      | -1412        | 83600 |              |
| DW0037            | 395951          | 1125468          | 4509U          | 0                  | 63442839     | 3368217295  | 8216823      | -1436        | 83249 |              |
| DW0038            | 395951          | 1125692          | 4393U          | 0                  | 57442846     | 3336317390  | 7216823      | -1577        | 83497 |              |
| DW0039            | 395778          | 1125692          | 4509U          | 0                  | 57442526     | 3335617255  | 9216566      | -1579        | 83100 |              |
| DW0040            | 395690          | 1125580          | 4512U          | 0                  | 64442360     | 3351217261  | 7216436      | -1359        | 83316 |              |
| DW0041            | 395596          | 1125692          | 4523U          | 0                  | 64442189     | 3334917229  | 5216296      | -1438        | 83200 |              |
| DW0042            | 395516          | 1125577          | 4554S          | 0                  | 69442038     | 3350917197  | 1216178      | -1351        | 83185 |              |
| DW0043            | 395428          | 1125691          | 4572U          | 0                  | 66441878     | 3334417129  | 2216047      | -1729        | 82742 |              |
| DW0044            | 395316          | 1125633          | 4667U          | 0                  | 74441069     | 3342217052  | 9215881      | -1434        | 82723 |              |
| DW0045            | 395316          | 1125803          | 4608U          | 0                  | 69441675     | 3317917047  | 7215881      | -2041        | 82311 |              |
| DW0046            | 395430          | 1125918          | 4543U          | 0                  | 64441889     | 3302017135  | 4216050      | -1945        | 82624 |              |
| DW0047            | 395516          | 1125606          | 4530U          | 0                  | 63442045     | 3318317190  | 2216178      | -1646        | 82966 |              |
| DW0048            | 395604          | 1125918          | 4509U          | 0                  | 60442211     | 3302717193  | 1216309      | -1945        | 82736 |              |
| DW0049            | 395690          | 1125806          | 4511U          | 0                  | 58442367     | 3319017238  | 9216436      | -1596        | 83075 |              |
| DW0050            | 395778          | 1125919          | 4501U          | 0                  | 56442533     | 3303317233  | 2216566      | -1879        | 82825 |              |
| DW0051            | 395866          | 1125805          | 4492S          | 0                  | 55442692     | 3319917279  | 8216697      | -1627        | 83107 |              |
| DW0052            | 395951          | 1125916          | 4483U          | 0                  | 53442853     | 3304517295  | 5216823      | -1683        | 83080 |              |
| DW0109            | 395235          | 1125882          | 4645R          | 0                  | 72441527     | 3306317002  | 7215761      | -2023        | 82206 |              |
| DW0110            | 395141          | 1125917          | 4722H          | 0                  | 75441355     | 3301016933  | 3215622      | -1849        | 82119 |              |
| DW0111            | 395007          | 1125759          | 4977H          | 0                  | 98441102     | 3323016787  | 7215423      | -706         | 82415 |              |
| DW0114            | 394821          | 1125972          | 5149Y          | 0                  | 92440764     | 3291616626  | 3215147      | -429         | 82102 |              |
| DW0115            | 394730          | 1125872          | 5262Y          | 0                  | 101440593    | 3305716510  | 1215012      | -390         | 81763 |              |
| DW0116            | 394652          | 1125745          | 5548Y          | 0                  | 144440444    | 3323516357  | 6214896      | 891          | 82112 |              |
| DW0117            | 394598          | 1125924          | 5167Y          | 0                  | 82440350     | 3297716519  | 2214816      | -999         | 81459 |              |
| DW0125            | 394972          | 1125330          | 5374Y          | 0                  | 123441024    | 3384016598  | 9215371      | 1192         | 82986 |              |
| DW0126            | 395073          | 1125533          | 4986Y          | 0                  | 109441217    | 3355516823  | 2215520      | -369         | 82735 |              |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM       | GRSV<br>GRAV | THEO<br>GRAV | FAA   | CR4<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|--------------|-------------------|--------------|--------------|-------|--------------|
| -----             | -----           | -----            | -----          | -----              | -----        | -----             | -----        | -----        | ----- | -----        |
| DW0127            | 395123          | 1125712          | 4808Y          | 0                  | 82441315     | 33301168884215595 | -1465        | 82216        |       |              |
| DW0128            | 395228          | 1125724          | 4692H          | 0                  | 73441509     | 33284169708215751 | -1633        | 82239        |       |              |
| DW0129            | 395186          | 1125578          | 4803Y          | 0                  | 81441427     | 33495169488215688 | -1000        | 82698        |       |              |
| DW0131            | 395086          | 1125277          | 5208Y          | 0                  | 106441233    | 33920166722215540 | 194          | 82537        |       |              |
| DW0132            | 395208          | 1125261          | 4977H          | 0                  | 84441458     | 33948168363215721 | -519         | 82589        |       |              |
| DW0133            | 393795          | 1125175          | 4762Y          | 0                  | 51438842     | 34016166568213627 | -2056        | 81685        |       |              |
| DW0135            | 394360          | 1125354          | 52470T         | 0                  | 100439892    | 33782164582214464 | -503         | 81701        |       |              |
| DW0136            | 394262          | 1125397          | 5126H          | 0                  | 91439712     | 33717165285214319 | -795         | 81613        |       |              |
| DW0137            | 394229          | 1125304          | 50561T         | 0                  | 78439648     | 33848165259214270 | -1430        | 81403        |       |              |
| DW0138            | 394133          | 1125344          | 4981H          | 0                  | 69439472     | 33787165722214127 | -1531        | 81549        |       |              |
| DW0139            | 394016          | 1125295          | 4870H          | 0                  | 59439254     | 33853166138213954 | -1987        | 81462        |       |              |
| DW0140            | 393954          | 1125427          | 5001Y          | 0                  | 69439143     | 33662165390213863 | -1409        | 81603        |       |              |
| DW0141            | 393907          | 1125285          | 4825H          | 0                  | 53439052     | 33863166208213793 | -2178        | 81418        |       |              |
| DW0142            | 393789          | 1125325          | 4786Y          | 0                  | 55438835     | 33801166456213618 | -2122        | 81609        |       |              |
| DW0143            | 393837          | 1125466          | 48379T         | 0                  | 57438928     | 33601166170213689 | -1991        | 81565        |       |              |
| DW0144            | 393886          | 1125561          | 5055Y          | 0                  | 82439022     | 33467165160213762 | -1031        | 81610        |       |              |
| DW0146            | 394054          | 1125457          | 4980H          | 0                  | 67439329     | 33623165960214010 | -1188        | 81495        |       |              |
| DW0147            | 394055          | 1125578          | 5277Y          | 0                  | 105439335    | 33450163968214012 | -383         | 81724        |       |              |
| DW0148            | 394185          | 1125485          | 51352T         | 0                  | 89439573     | 33586165591214205 | -289         | 82286        |       |              |
| DW0149            | 394190          | 1125575          | 51991T         | 0                  | 82439584     | 33485165659214212 | 375          | 82725        |       |              |
| DW0150            | 394295          | 1125626          | 5385Y          | 0                  | 134439780    | 33391164537214367 | 849          | 82616        |       |              |
| DW0152            | 394464          | 1125428          | 55951T         | 0                  | 126440087    | 33680162953214618 | 990          | 82033        |       |              |
| DW0153            | 394382          | 1125709          | 5466Y          | 0                  | 115439444    | 33276163872214496 | 816          | 82286        |       |              |
| DW0154            | 394273          | 1125749          | 5138H          | 0                  | 87439743     | 33214165268214335 | -714         | 81849        |       |              |
| DW0155            | 394186          | 1125691          | 51050T         | 0                  | 80439581     | 33294165881214206 | -283         | 82385        |       |              |
| DW0156            | 394165          | 1125779          | 50259T         | 0                  | 71439545     | 33167165654214175 | -1223        | 81706        |       |              |
| DW0157            | 394056          | 1125766          | 4970Y          | 0                  | 67439343     | 33181165943214013 | -1299        | 81816        |       |              |
| DW0158            | 394055          | 1125682          | 5051Y          | 0                  | 73439338     | 33301166108214012 | -376         | 82475        |       |              |
| DW0159            | 393936          | 1125791          | 4924H          | 0                  | 65439121     | 33140165818213836 | -1678        | 81592        |       |              |
| DW0160            | 393960          | 1125668          | 4980Y          | 0                  | 66439162     | 33317166029213871 | -977         | 82104        |       |              |
| DW0161            | 393822          | 1125699          | 4885Y          | 0                  | 65438908     | 33267166249213666 | -1447        | 81957        |       |              |
| DW0162            | 393794          | 1125848          | 49639T         | 0                  | 74438660     | 33053165414213625 | -1496        | 81647        |       |              |
| DW0163            | 393752          | 1125742          | 4932Y          | 0                  | 69438779     | 33203165982213563 | -1166        | 82081        |       |              |
| DW0164            | 393924          | 1125915          | 4962H          | 0                  | 67439103     | 32963165116213818 | -1819        | 81256        |       |              |
| DW0165            | 394054          | 1125916          | 4968C          | 0                  | 65439344     | 32967165162214010 | -2096        | 81024        |       |              |
| DW0166            | 394138          | 1125883          | 49731T         | 0                  | 67439498     | 33017165450214135 | -1886        | 81220        |       |              |
| DW0167            | 394245          | 1125948          | 5007H          | 0                  | 73439698     | 32929165251214293 | -1924        | 81072        |       |              |
| DW0168            | 394297          | 1125861          | 5083Y          | 0                  | 78439791     | 33055165244214370 | -1292        | 81449        |       |              |
| DW0169            | 394397          | 1125882          | 5146H          | 0                  | 90439977     | 33029165085214519 | -1006        | 81532        |       |              |
| DW0170            | 394494          | 1125847          | 5258Y          | 0                  | 85440155     | 33083164753214663 | -427         | 81724        |       |              |
| DW0217            | 393663          | 1125802          | 50239T         | 0                  | 83438617     | 33114165622213431 | -530         | 82417        |       |              |
| DW0019            | 40 39           | 1125805          | 4435U          | 0                  | 53443012     | 33206173803216954 | -1416        | 83516        |       |              |
| DW0020            | 40 214          | 1125806          | 4459U          | 0                  | 55443336     | 33212174239217214 | -1015        | 83432        |       |              |
| DW0022            | 40 37           | 1125580          | 4515U          | 0                  | 64443002     | 33526173372216951 | -1091        | 83573        |       |              |
| DW0023            | 40 212          | 1125580          | 4475U          | 0                  | 55443325     | 33533173836217211 | -1263        | 83529        |       |              |
| DW0025            | 40 38           | 1125355          | 4504U          | 0                  | 66442997     | 33846173186216952 | -1404        | 83301        |       |              |
| DW0026            | 40 214          | 1125355          | 4499U          | 0                  | 65443322     | 33853173687217214 | -1190        | 83530        |       |              |

## SEVIER DESERT, UTAH GRAVITY DATA

| STATION<br>IDENT. | LAT.<br>DEG MIN | LONG.<br>DEG MIN | ELEV.<br>+CODE | TER-COR.<br>IN/OUT | NORTH<br>UTM | EAST<br>UTM | CHSV<br>GRAV | THEO<br>GRAV | FAA   | CHA<br>+1000 |
|-------------------|-----------------|------------------|----------------|--------------------|--------------|-------------|--------------|--------------|-------|--------------|
| DW0018            | 40 126          | 1125918          | 44570          | 4                  | 52443177     | 330491738   | 37217083     | -1305        | 83549 |              |
| DW0145            | 393974          | 1125585          | 5351Y          | 25                 | 171439185    | 334371637   | 11213892     | 176          | 82121 |              |
| DW0216            | 393699          | 1125960          | 5227Y          | 15                 | 90438688     | 328891638   | 46213484     | -448         | 81829 |              |
| DW0113            | 394856          | 1125708          | 5595Y          | 33                 | 178440821    | 332961640   | 08215199     | 1465         | 82593 |              |
| DW0118            | 394586          | 1125672          | 5910Y          | 123                | 62440320     | 333371611   | 84214798     | 122          | 80932 |              |
| DW0120            | 394679          | 1125473          | 6345Y          | 126                | 364440486    | 336251584   | 82214937     | 3262         | 62111 |              |
| DW0130            | 395158          | 1125426          | 5288Y          | 4                  | 206441371    | 337101664   | 18215647     | 534          | 82708 |              |
| DW0123            | 394867          | 1125538          | 5830Y          | 21                 | 235440836    | 335391624   | 26215215     | 2078         | 82450 |              |
| DW0124            | 394982          | 1125611          | 5334Y          | 18                 | 149441051    | 334401657   | 39215386     | 550          | 82525 |              |
| DW0021            | 40 125          | 1125692          | 44700          | 0                  | 126443168    | 333701738   | 17217081     | -1199        | 83680 |              |
| DW0024            | 40 125          | 1125466          | 44940          | 0                  | 60443161     | 336921736   | 06217081     | -1185        | 83547 |              |
| DW0029            | 395687          | 1125240          | 4413S          | 0                  | 149442344    | 339961728   | 96216431     | -2008        | 83089 |              |
| DW0033            | 395438          | 1125444          | 4706H          | 0                  | 86441889     | 336961707   | 80216062     | -996         | 83039 |              |
| DW0112            | 394924          | 1125874          | 5410Y          | 52                 | 501440952    | 330621644   | 70215300     | 84           | 82185 |              |
| DW0134            | 394436          | 1125279          | 5273Y          | 0                  | 102440031    | 338921645   | 84214577     | -369         | 81748 |              |
| DW0151            | 394313          | 1125505          | 5484Y          | 0                  | 142439810    | 335641637   | 13214394     | 929          | 82367 |              |
| DW0222            | 393368          | 1125916          | 7208S          | 86                 | 3307438075   | 329381500   | 50212995     | 5746         | 84244 |              |
| DW0224            | 393179          | 1125871          | 7045V          | 108                | 3073437724   | 329951518   | 85212715     | 5478         | 84630 |              |
| DW0286            | 392980          | 1125625          | 4963Y          | 0                  | 97437348     | 333401655   | 52212420     | -164         | 83006 |              |
| DW0282            | 392686          | 1125983          | 5308Y          | 0                  | 102436815    | 328151627   | 91211985     | 739          | 82744 |              |
| DW0303            | 392250          | 1125483          | 46489T         | 0                  | 53435993     | 335151655   | 00211341     | -2091        | 82105 |              |

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